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Human Nutrition Research • Division of Education and Human Services

November 18, 1996

TO: Kilolo Kijakazi
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Food and Consumer Service
3101 Park Center Drive, Room 206
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FROM: C. J. Lee, Principal Investigator

RE: Final Report (59-3198-5-031)

Enclosed are the original plus 25 copies of the revised termination report for Grant 59-3198-5-031. As per our telephone conversation, I plan to be at your office on December 5 at 2 p.m. to make my report. Please be advised that I will be needing a slide projector for my presentation.

I thank you very much for your assistance rendered to me throughout the project period. I am looking forward to meeting you and others on December 5.

Termination Report

PROJECT TITLE

Socioeconomic characteristics, diet quality, and quality of well-being of rural elderly residing in southern states based on food stamp program participation

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EXECUTIVE SUMMARY

Information on nutrient consumption in relation to socioeconomic factors of the rural elderly population, particularly on food stamp recipients, is essential for improvement of the program effectiveness, but is limited. Scientists at the 1890 institutions, the Historically Black Land Grant Colleges and Universities, with support of USDA, have conducted two multi-state surveys exclusively on elderly residing in rural communities, Regional Research 4 (RR4, on 65 yrs and older residing in 11 southeastern states) and Regional Research 6 (RR6, on 60 years and older residing in 9 southeastern states). These two projects are the first available multi-state data on rural elderly and provide comprehensive information on socioeconomic profiles, health history and diets of elderly. This report focuses on findings of RR4 and RR6 with particular attention given to the recipients of Food Stamps to uncover nutritional practices and the quality of diets.

There were 429 and 364 Food Stamp Program (FSP) participants and 2423 and 1175 non-FSP participants, respectively, in RR4 and RR6 projects, constituting 14.9% and 23.6% of participants. The majority of these FSP participating rural elderly (77.5%) were satisfied with the program.

As compared to the FSP non-participants, the FSP participating elderly had significantly higher proportions of females, African-Americans, and persons with lower schooling, persons who lived alone, consumed meals alone, and smoked. The FSP recipients had significantly lower incomes (monthly income \$448 vs. \$727 for RR4 and \$493 vs. \$1154 for RR6), and spent significantly higher proportions of their income on foods (33.3% vs. 28.3% in RR4 and 31.7% and 23.4% in RR6). Significantly higher proportions of the FSP participating rural elderly, as compared to the non-participating, resided 5 or more miles away from libraries, drug stores and churches; significantly lower proportions of FSP participating rural elderly had a car or could drive, and significantly greater proportions of elderly depended on others to drive or public transportation where available. The FSP participating elderly had significantly lower self-rated quality of well-being in all aspects studied: economic, independent living, social and psychological

well-being.

For the majority of nutrients studied, FSP participating elderly consumed significantly less than the non-FSP participating elderly. However, when income was matched, the disparity in nutrient intakes between FSP participating and non-participating rural elderly disappeared. The moderation aspect of diet quality (intake of fat, saturated fat, cholesterol and sodium) of FSP participating elderly did not differ from that of FSP non-participating elderly, however, the adequacy aspect (intake of 15 nutrients in comparison to the Recommended Daily Allowances) suffered most in diets of FSP participating elderly, resulting in lowered overall diet quality. When income was matched, the disparity in diet quality was either reduced (RR4) or disappeared completely (RR6).

Even when the income was matched, significantly higher proportions of the FSP participating elderly had lower education, lived alone, skipped meals routinely, had to eliminate certain foods because of difficulty with chewing, swallowing, keeping food down, stomach pain/diarrhea, or difficulty with food preparation; and FSP participants had significantly higher prevalences of diabetes, hypertension, kidney disease, gastrointestinal problems, osteoporosis and physical handicaps.

In conclusion, the findings of the present study revealed that the FSP participating rural elderly, in spite of their health problems and socioeconomic difficulties, when compared to income-matched FSP non-participating elderly, were able to bring their nutrient intakes up to equivalent levels, which is considered to be attributable to the FSP. The findings further suggest that, while the income is the major controlling factor, the participation in FSP alone is grossly inadequate to bring their quality of life to levels of their higher income FSP non-participating counterparts. Thus, more aggressive intervention, along with FSP, to reduce some of the modifiable risk factors through persistent nutrition guidance, is strongly suggested to bring up the quality of diet of rural elderly with limited income and education.

INTRODUCTION

An increasing proportion of the population in the United States consists of older individuals. The elderly population presents a challenge to all health care professionals, because they are disproportionately large consumers of costly health and medical care (1). Evaluation of the Elderly Nutrition Program of the Older American Act revealed that between 67% and 88% participants are at nutritional risk (2). It has been estimated that about one quarter of those aged 65 and older live in rural areas (3). Rural elderly in southern states are more likely to have incomes below the poverty level, to have a larger number of health problems and to have less accessibility to health and human services than their urban counterparts (4). Reports on the effectiveness of food stamps in improving nutrition are not consistent as some studies have found that elderly who received food stamps had a more nutritious diet (5 - 7), while others reported little or no effect (8, 9). The information on rural elderly is even more scarce. The 1890 institutions, historically Black land-grant colleges and universities, have conducted two major multi-state surveys exclusively on elderly residing in rural communities, Regional Research 4 (RR4) (10) and Regional Research 6 (RR6) (11). These surveys collected a wide range of information from rural elderly on socioeconomic profiles, health history, self-rated quality of life, food intake and dietary practices, and location of residence, availability and accessibility of transportation, social/health/religious services. Based on the information collected by these two surveys, this study is to compare the quality of well-being of rural elderly, nutrient intakes and diet qualities of rural elderly between the food stamp recipients and non-recipients.

STUDY OBJECTIVES

Specific objectives were:

1. To delineate socioeconomic characteristics of rural elderly based on the food stamp program participation and ethnicity;
2. To examine the influence of factors such as the location of residence, distance to social service center, availability and accessibility of transportation, and program satisfaction on food stamp program participation;
3. To compare the self-rated quality of life (economic, psychological, social and independence) based on food stamp program participation status between African-American and Caucasian elderly; and
4. To evaluate the impact of food stamp program participation on nutrient intake, food patterns, quality and adequacy of diet.

METHODOLOGY

RR4 Project

Sampling procedure

This paper reports a portion of the data collected through a regional research project in 11 southern states (AL, AR, GA, KY, MD, MS, MO, SC, TN, TX and VA). Consistent sampling and data collection procedures were employed by the 11 participating institutions. These procedures were jointly developed by researchers at the participating institutions and detailed in a project manual. The survey techniques were standardized through workshops, and by pretesting the questionnaires used in the survey. Each institution was responsible for obtaining its own human subjects approval of the project.

From each state, 6 rural counties (less than 30% urban population) were selected by a stratified random sampling technique based on population size and the median household income as shown in the 1980 Census data. The same sampling technique was used to select the enumeration districts from the 1980 Census map for each sampling county. Depending on the district's population size, one or more sampling units consisting of 5 persons each were assigned to each enumeration district. This procedure was employed to provide a total sample of 300 elderly persons in each state.

Data collection and procedure

Data collected by interview, between summer 1987 and summer 1988, included socioeconomic information, health and diet history, a 24 hr food intake recall, use of nutritional supplements, self-rated health status, dietary practices relative to the quality and quantity of food intake, and quality of well-being pertaining to economic, independence, social and psychological aspects of their lives.

Computation of Nutrient Intakes: Nutrient intakes were computed from the 24 hr food recall by using the nutrient data bank stored at Lincoln University, which was based on the USDA Handbook 8, which is a compilation of nutrient compositions of most food items, raw and processed forms, available for consumer use. Additional data were obtained from various food manufacturers and added to the nutrient data bank. The Recommended Dietary Allowances (RDA) (12), levels of intake of essential nutrients judged adequate to meet the needs of practically all healthy persons, was used as a standard for assessing nutrient intakes. The standard serving size for each food type (13) was used to compute the number of servings consumed in each food group. Responses to questions on the number of meals consumed were used to determine whether they were three-meal eaters or meal skippers. The number of meals consumed daily for at least five days a week was used as their usual practice. The details

of sampling, data collection and data processing methodology are presented in previous publications (10 and 14).

General well-being as perceived by the rural elderly in south: In order to prepare an index which represents the overall quality of well-being indicator, 29 questions concerning economic (6 items), independence (7 items), social (9 items) and psychological (7 items) well-being were developed as shown below and a composite score of these 29 items was used as the overall quality of well-being index.

Economic well-being

The degree of satisfaction with:

1. Present income
2. Life savings
3. Amount of money you have to spend on clothing
4. Amount of money you have to spend on housing
5. Amount of money you have to spend on food
6. Ability to meet personal and household expenses

Independent living

The degree of satisfaction with:

1. Ability to take care of your household chores
2. Ability to get around without help from others
3. Ability to solve own problems
4. Ability to make own decisions
5. Ability to prepare own meals
6. Ability to travel
7. Ability to take care of personal hygiene

Social well-being

The degree of satisfaction with:

1. The contact one has with family
2. The contact with friends
3. The contact with neighbors
4. The contact with young people
5. Involvement in religious activities
6. Involvement in social activities
7. Involvement in senior centers' program
8. Involvement in community activities
9. The location of home in relation to other homes in the community

Psychological well-being

The degree of satisfaction with:

1. Spending time alone
2. Activities since retirement
3. Life accomplishments
4. The safety of home
5. Living arrangement
6. Adjustments made since retirement
7. Reaching retirement age

RR6 Project

Sampling Strategy: A regional research project conducted in 9 southern states (AL, AR, GA, KY, MD, MO, MS, TN, & TX) served as the primary data source for this report. From each participating state, all rural counties (with 70% or more non-metropolitan population) were grouped into two classifications, high elderly population density (HEPD) or low elderly population density (LEPD), as compared to each state's overall prevalence of elderly population. Eight counties, consisting of an equal number of the HEPD and LEPD counties, were selected from each state. Indigenous interviewers in the selected counties were used in recruiting the eligible elderly participants through personal contacts, churches, senior citizen centers, and low income elderly housing. If the target number of 200 elderly were not found in the 8 counties, additional counties were added until 200 volunteers were selected. Inclusion of elderly in the study were based on the following criteria: the elderly 1) should participate in planning, purchasing, preparing or selecting menus for her/himself; 2) should not have had a major illness or surgery during the past 12 months which resulted in major changes in meal practices; and 3) should not participate in congregate meals more than three days each week. The reasons for imposing these restrictions on participation in the study were to make sure those who did not have any alternatives in practicing own meal habits were eliminated.

Data Collection: Each participating station collected their respective state data. The data collection methodology was synchronized and the manual developed jointly was used throughout. The data collected by interviewers included information on socioeconomic factors, health history, nutrition knowledge, food attitudes and practices, and sources of information for nutrition. Information on food consumption was obtained through two non-consecutive day food intakes by 24-hr recall method. Wherever possible, nationwide survey and regional survey questionnaires were adapted. Included were the USDA Diet and Health Knowledge Survey (15), and the questionnaires developed and used by the USDA Regional Research Project #4 (10). All questionnaires were pre-tested and revised accordingly prior to the data collection.

Data Processing: Computation of nutrient intake - The food intakes collected by 24-hr recall method were processed by using Nutritionist IV (16), which is a computer software designed to compute nutrient intakes out of food intake data. The primary source of nutrient data bank is the USDA Agriculture Handbook 8 with additional information collected from various food manufacturers. The average of the two daily intakes was used for comparison. The nutrient intakes were also compared to the Recommended Dietary Allowances (RDA) (12) and expressed as per cent RDA for comparison. **Number of servings by food group** - The food intake data were

also used in estimating the number of servings for each food group. For each individual food item reported, the weight of a standard serving of that item was divided into the amount actually consumed to compute the number of servings consumed. The Food Guide Pyramid (13) was used for standard serving portions. For mixed dishes, the contribution to each major food group was estimated by analyzing nutrient content of the item or its ingredients. Snack and sweet grain servings were accumulated separately from other grain products so that desired indexes could be computed.

Indexing Diet Quality (RR4 and RR6)

In the present study, the diet quality was indexed using the methods of Patterson et al. (17) for the Diet Quality Index (DQI), and Basiotis et al. (18) for the Diet Status Index (DSI). The DQI was designed based on the eight recommendations from the 1989 NAS publication Diet and Health. The Diet Status Index (DSI), consisting of a Dietary Adequacy Score (DAS) and a Dietary Moderation Score (DMS), was developed based on the conceptual framework of the Food Guide Pyramid. The DAS is computed based on adequacy ($\geq 100\%$ RDA) of intake of 15 nutrients including protein, vitamins and minerals with known RDA. The DMS is based on intakes of fat, saturated fat, cholesterol and sodium. Scores of DAS and DMS are scaled to 100 and the average of the two is termed DSI.

Statistical Analyses

Data from each state were merged and evaluation was done separately on the RR4 and RR6 data. Because of the differences in sampling methodology (population based random sampling vs. convenience sampling) and the separate nutrient data banks used (Lincoln University compiled vs. Nutritionist IV), data collected by RR4 and RR6 were not merged. The SPSS (19) and StatView (20) software packages were used. A factorial ANOVA technique, combined with Fisher's Protected Least Significant Difference, was used to determine significant differences in intake, diet quality and quality of life indices by food stamp program participation status and selected socioeconomic variables.

FINDINGS

Socioeconomic characteristics of Food Stamp Program participants

The overall response rates were 0.896 and 0.881, respectively for RR4 and RR6. The sample sizes shown in the tables vary slightly due to missing data. **Table 1** presents the summary data on socioeconomic variables for both RR4 and RR6 projects. There were 429 and 364 Food

Stamp Program (FSP) participants and 2423 and 1175 non-FSP participants, respectively, in RR4 and RR6 projects, constituting 14.9% and 23.6% of participants, respectively. The food stamp participants consisted of significantly higher proportions of female than male and African-American than Caucasian. The FSP participants in RR4 project were slightly older (74.9 vs. 73.8 yrs), however, for RR6 project, mean age of the FSP participants and non-participants did not differ. The mean educational level was significantly lower for the FSP participants than that of non-participants for both projects. The monthly household income, per capita monthly income, and weekly food expenditure for the FSP participants were significantly ($p<0.0001$) lower than their non-participating counterparts. The proportions of income spent on food for the RR4 project were 33.3% and 28.3% for FSP participants and non-participants, respectively. For the RR6 project, they were 31.7% and 23.4% for FSP participants and non-participants, respectively. Significantly higher proportions of FSP participating rural elderly lived alone and consumed meals alone than non-participants did. A higher proportion of FSP participants smoked as compared to their non-participating counterparts.

Location of residence, accessibility and availability of social service centers and transportation

RR4 data revealed that higher proportions of rural elderly resided in a non-farm rural community (39.4% for FSP participants and 36.4% for non-participants), as compared to those living in farm or towns as presented in **Table 2**. About equal proportions of elderly resided in rural farm, towns with less than 2,500 population, and town with 2,500 - 50,000 populations. There was no significant difference between FSP-participants and non-participants in regard to location of their residence.

Table 2 also contains information relative to location of social, medical and religious services from their residence. Regardless of the participation status in FSP, the majority of rural elderly reside more than 5 miles from a hospital, followed by locations for social service, doctor's office, library, senior center, drug store, grocery store and religious service. Significantly higher proportions of FSP participants resided away from libraries ($p<0.0194$), drug stores ($p<0.0147$), and churches ($p<0.0248$) than non-participants. The proportions of rural elderly residing 5 or more miles from hospital, social service, doctor's offices, senior centers, and grocery stores did not significantly differ due to FSP participation status.

Table 2 also presents the accessibility and mode of transportation used among rural elderly based on RR4 and RR6 data. The proportion of rural elderly who were able to drive an automobile was about the same between the FSP participants and non-participants for RR4, but was lower among FSP participants in RR6 project. Among the FSP participating rural elderly, incidences of having an automobile was lower, and a higher proportion of elderly depended on

public transportation or others to drive. Both surveys revealed that the majority of FSP participating elderly depend on others to drive for their transportation. Based on the observations presented above, participation in FSP program does not appear to be influenced by the location of residence.

The RR6 data indicated that the majority (77.5%) of rural elderly participating in FSP were satisfied with the program. There were 180 elderly, out of 3,080, who responded on the community service section of the survey that they were in need of Food Stamps but do not participate in the FSP. Reasons for not participating in community services and programs designed for elderly, including the FSP, were a lack of information as the first reason, followed by inaccessible, lack of transportation, too much paper work, not meeting the needs, and too little incentive, as presented in **Table 3**.

Quality of life and FSP participation status

Table 4 contains information on rural elderly's self-rated quality of life relative to economic, independent living, social, and psychological well-being and the overall quality of life by FSP participation status and race. This information was extracted from RR4 data. Overall, 61.4% of the elderly were very satisfied/satisfied, 33.0% were neutral, and 5.6% were very dissatisfied/dissatisfied for the combined 29 questions pertaining to the various aspects of the well-being. The quality of well-being in all categories studied were significantly ($p<0.0001$) and consistently inferior among the food stamp program participants, and among African-American elderly on economic ($p<0.0001$) and social well-being ($p<0.0091$) and the overall quality of life ($p<0.0001$). Since the food stamp recipients had significantly lower income, the comparisons on quality of well-being were made on income matched group by using the lowest income group (monthly income $<\$500$). These results are also presented in Table 4. Again, for each category of well-being studied and the overall quality of life, the food stamp program participants and African-Americans had significantly and consistently lower quality of well-being than their non-FSP recipients and Caucasian counterparts.

Food consumption patterns, adequacy and quality of diets

Nutrient intakes: The daily nutrient intakes computed from one 24-hr recall for RR4 and two 24-hr recalls on non-consecutive day intakes for RR6 are presented in **Table 5**. With exception of calcium, magnesium, dietary energy and zinc, the intakes for nutrients either exceeded or approached 100% RDA among the RR4 participants. The FSP participants had significantly lower intakes than FSP non-participants did.

In RR6, the intake of additional nutrients were computed for vitamins D, E, B6 and B12. In addition to intakes of calcium, magnesium, zinc and energy being low, the mean intakes of

vitamin D and vitamin B6 were below 100% RDA irrespective of FSP participation status. While intakes of protein, niacin, and vitamins A, D, and B12 did not differ, intakes for other nutrients studied were lower among the FSP participants than those for non-participants. The mean daily nutrient intakes were also compared on income matched group (monthly income less than \$500). The findings are summarized in **Table 6**. On the same income basis, the disparities which existed between the FSP participants and non-participants disappeared for all but riboflavin for RR4 and dietary energy for RR6 group.

Consumption pattern by food groups: The number of servings for each food group consumed by rural elderly were compared based on the FSP participating status (**Table 7**). RR4 data indicated that the FSP participants consumed a higher number of servings in meat/poultry/fish/legume with fewer servings in milk/cheese and fruits/vegetable groups; the RR6 data also revealed that FSP participants consumed fewer servings in all food groups except meat/poultry/fish and legumes.

The food group serving data were compared on income-matched FSP participants and non-participants. These findings are presented in the same table. When income was adjusted, the disparity in number of servings disappeared with exception of meat/poultry/fish/legumes in RR4 and vegetables and grain products in RR6. The FSP participants in RR4 still consumed a higher number of servings in meat/protein foods while FSP participants in RR6 consumed fewer servings in grains and vegetables.

Diet quality: Comparison on the quality of diet consumed by FSP participants and non-participants of RR4 and RR6 are presented in **Table 8**. For both RR4 and RR6, the FSP participants had lower quality diets as measured in DAS, DSI, and DQI, but not DMS. When the income was adjusted, the difference still remained between the FSP participants and non-participants for RR4, however, the difference no longer existed in RR6. Since the data bank used to compute nutrient intake for RR4 had not been updated, and the quality of diet was computed with a few missing variables (including vitamins D, E, B6 and B12) the RR4 data are considered less reliable than the RR6 data. A further evaluation of diet quality revealed that every index studied was highly correlated ($p<0.0001$) to the level of diet/health knowledge of rural elderly who participated in RR6 (21), suggesting the necessity of nutrition education in order to improve the quality of their diet.

In spite of the fact that the income level was matched, disparity still existed between the FSP- and non-participants in the quantity of nutrients consumed, number of food servings and quality of well-being; therefore, the characteristics of elderly were further examined based on RR4 data. **Table 9** presents the findings. The FSP participants had less schooling, and higher proportions consumed meals alone and skipped meals regularly. The FSP participants had higher

prevalences of health problems including diabetes, hypertension, kidney, gastrointestinal disturbances, osteoporosis and physical handicaps. Also, higher prevalences of avoiding certain foods because of difficulty in chewing, swallowing, keeping food down, stomach pain and diarrhea or difficulty with food preparations were observed among the FSP participants.

SUMMARY AND CONCLUSION

The examination of two regional research data sets (RR4 and RR6) from surveys conducted on rural elderly residing in south-eastern states revealed that the rates of FSP participation among the rural elderly were 14.9% for RR4 and 23.6% for RR6, and the majority of participants of the FSP (77.5%) were satisfied with the service they received. Significant differences for the food stamp program participating elderly, as compared to non-participating elderly, include :

1. There was a higher proportion of female and African-Americans than male and Caucasians;
2. The educational level was significantly lower;
3. A significantly higher proportion of their income was spent on food;
4. A higher proportion lived alone and consumed meals alone;
5. Higher proportions lived away from library, drug store, and churches;
6. A lower proportion had a car and a higher proportion had to depend on public transportation and others to drive;
7. There was a lower self-rated quality of life in regard to economic, social and psychological well-being and maintenance of independent living was reported;
8. FSP participating African-Americans rated lower than FSP participating Caucasians in all categories of well-being studied; and
9. Intakes of many nutrients studied were lower, the number of food servings were fewer, and the quality of diets were inferior.

When income level was adjusted, the disparity in nutrient intakes, diet quality and number of servings in food groups was reduced significantly, however, the disparity in self-rated quality of life still remained. Further examination of data revealed that even at the same income level, the FSP participants still had lower educational level, a higher proportion consumed meals alone, a higher proportion of individuals skipped meals, and significantly higher proportions had various health problems. Combined together, these socioeconomic difficulties and health problems led FSP participants to consume inferior diets and lowered self-rated quality of life.

The findings of the present study suggest that the rural elderly receiving Food Stamps were not only economically deprived but their well-being was compromised by other chronic health problems, lack of accessibility to transportation, living and eating alone, and low schooling as compared to other rural elderly. More aggressive action programs to reach out to the low income rural elderly are strongly recommended.

REFERENCE CITED

1. Murphy S, Davis M, Neuhaus J, and Lein D. Factors influencing the dietary adequacy and energy intake of older Americans. *J Nutr Ed* 22(6): 284-91, 1990.
2. Posner BM, Jotte AM, Smith KW, and Miller DR. Nutrition and health risks in the elderly: The nutrition screening initiative. *Am J Publ Hlth* 83 (7): 971-78, 1993.
3. Coward RT, Lee GR. The Elderly in Rural Society: Every Fourth Elder. New York: Springer, 1985.
4. Krout JA. The Aged in Rural America. New York: Greenwood Press, 1986.
5. Kafatos AG and Zee P. Nutritional benefits from federal food assistance: a survey of preschool black children from low-income families in Memphis. *Am J Dis Child.* 131: 265-9, 1977.
6. Guthrie HA, Black K, and Madden JP. Nutritional practices of elderly citizens in rural Pennsylvania. *Gerontologist* 12: 330-5, 1972.
7. Lane S. Food distribution and food stamp program effects on food consumption and nutritional "achievement" of low income persons in Kern County, California. *Am J Agr Econ*, 108-116, 1978.
8. Lopez LM and Habicht JP. Food stamps and the energy status of the U. S. elderly poor. *J Am Diet Assoc* 87: 1020-4, 1987.
9. Weimer JP. The nutritional status of the elderly. *J Nutr Elderly* 2: 17, 1983.
10. Technical Report: Quality of Well-being of Rural Elderly - Food, Clothing, Shelter. The 1890 Home Economics Regional Research Project #4 (1990).
11. Evaluation of the Effective Intervention Methods to Improve the Quality of Well-being of Rural Elderly. USDA/CSREES/the 1890 Regional Research #6. 1990-97.
12. Food and Nutrition Board, National Research Council. Recommended Dietary Allowances. 10th ed. Washington, DC: National Academy of Sciences, 1989.
13. U. S. Department of Agriculture, Human Nutrition Information Service. 1992. The Food Guide Pyramid. Home and Garden Bulletin No. 252.
14. Lee CJ, Tsui J, Glover E, Glover LB, Kumelachew M, Warren AP, Perry G, Godwin S, Hunt SK, McCray M and Stigger EF. 1991. Evaluation of nutrient intakes of rural elders in

eleven southern states based on sociodemographic and life style indicators. Nutr Res, 11: 1383-1396.

15. USDA. 1996. Continuing Survey of Intakes by Individuals, Diet and Health Knowledge Survey 1989-91. NTIS, PB96-501010.
16. Nutritionist IV. N-squared Computing, San Bruno, CA: 1993.
17. Patterson RE, Haines PS and Pokin BM. 1994. Diet quality index: capturing a multidimensional behavior. J Am Diet Assoc, 94:57-64.
18. Basiotis PP, Guthrie JF, Bowman SA and Welsh SO. 1995. Construction and evaluation of a diet status index. Family Economics and Nutrition Review, 8: (2), 2-13.
19. Norusis, MJ. 1994. SPSS 6.1 Base System User Guides 1 & 2. SPSS Inc. Chicago, IL.
20. StatView. Abacus Concepts, Inc., Berkeley, CA: 1994.
21. Lee CJ, Godwin SL, Tsui J, Kumelachew M, McWhinney SL, Idris R, Hunt S, Warren AP, and Stigger F. Diet knowledge is reflected in nutrient intakes and diet quality of the rural elderly. J Am Diet Assoc (Submitted for publication).

Table 1: Socioeconomic characteristics of food stamp program participants.

	RR4 (1987-88)			RR6 (1992-93)		
	FSP- Participants n=410	Non- Participants n=1461	Sig. p	FSP- Participants n=364	Non- Participants n=1175	Sig. p
			0.0002			0.0004
Gender, %						
Male	14.4	22.2		11.1	17.4	
Female	85.6	77.8		89.0	82.6	
Ethnicity, %			0.0001			<0.0001
African American	41.5	16.9		54.9	31.6	
Caucasian	58.5	83.1		45.1	68.4	
Age, yrs	74.9 ± 7.5	73.8 ± 6.7	0.0380	72.9 ± 7.9	72.4 ± 7.8	n.s.
Education*	1.8 ± 0.8	2.5 ± 0.9	<0.0001	1.9 ± 0.7	2.6 ± 0.9	<0.0001
Monthly Income, \$/m	448 ± 164	727 ± 373	<0.0001	493 ± 206	1154 ± 934	<0.0001
Per Capita Income, \$/month	205 ± 81	334 ± 184	<0.0001	436 ± 147	875 ± 673	<0.0001
Weekly Food Expenditure, \$	33 ± 16	43 ± 22	<0.0001	34 ± 19	44 ± 24	<0.0001
Food \$/Income, %	33.3 ± 15.8	28.3 ± 16.1	<0.0001	31.7 ± 17.5	23.4 ± 16.5	<0.0001
Prevalence, %						
Lived alone	63.4	41.1	<0.0001	60.0	38.6	<0.0001
Eat Alone	65.0	43.1	0.0001	78.0	56.7	<0.0001
Smokers	30.9	20.7	0.0001	28.9	18.0	<0.0001

*Educational level 1, 2, 3, and 4, respectively, denote no schooling to elementary school, junior high to some high school, completion of high school, and post high school.

Table 2: Location of residence, service area, accessibility and availability of transportation

	FSP- Participants <u>Based on RR4 Data</u> n=429	Non- Participants n=2436	Sig.
Residence	%	%	n.s.
Rural/Farm	17.5	23.2	
Rural/Non Farm	39.4	36.4	
Town (Less than 2500 people)	23.1	19.7	
Town (2500 to 50,000 people)	20.0	20.6	
Location 5 or more miles away from residence	n=430	n=2439	
Hospital	70.5	69.9	n.s.
Social Service	58.8	57.7	n.s.
Doctor's location	54.0	50.2	n.s.
Library	53.3	47.1	0.0194
Senior Center Location	52.7	48.3	n.s.
Drug store	51.4	44.6	0.0147
Grocery store	30.1	26.3	n.s.
Religious services	19.8	15.4	0.0248
Accessibility & Use of Transportation	n=423	n=2423	
Can drive	59.3	58.8	n.s.
Have a car	61.0	70.2	<0.0001
Depend on public transportation	27.5	18.6	<0.0001
Depend on others to drive	79.7	44.5	<0.0001
<u>Based on RR6 Data</u>			
Accessibility & Use of Transportation	n=364	n=1175	
Can drive	44.0	77.3	<0.0001
Have a car	35.7	76.5	<0.0001
Depend on public transportation	48.0	34.4	<0.0001
Depend on others to drive	67.8	37.6	<0.0001

Table 3: Reasons for not participating in services/programs for elders among the rural elderly who indicated a need for FSP but do not participate in FSP (180 out of 3,080 surveyed)

Reasons	%
Lack of information	56.7
Inaccessible	32.2
Lack of transportation	28.9
Too much paper work	19.4
Not meet needs	18.3
Too little incentive	11.1
Indifferent	10.0
Other	14.4

Note: Respondents were asked to choose as many responses as applied, thus, the total exceeds more than 100.

Table 4: Self-rated quality of life by race and Food Stamp Program participation.

All participants							
	African-Americans	Caucasians		Sig. due to:			
	FSP-Participants n=171	Non-Participants n=243	FSP-Participants n=396	Non-Participants n=1957	FSP-participation	Race	Interaction
Economic Well-being	2.5 ± 1.1	2.8 ± 1.1	2.9 ± 1.0	3.5 ± 0.9	<0.0001	<0.0001	0.0062
Independent living	3.5 ± 0.9	3.7 ± 0.8	3.4 ± 0.9	3.8 ± 0.8	<0.0001	n.s.	n.s.
Social Well-being	3.6 ± 0.6	3.8 ± 0.6	3.5 ± 0.7	3.7 ± 0.6	<0.0001	0.0091	n.s.
Psychological Well-being	3.6 ± 0.7	3.8 ± 0.7	3.6 ± 0.7	3.9 ± 0.6	<0.0001	n.s.	n.s.
Quality of Life*	3.1 ± 0.7	3.5 ± 0.7	3.3 ± 0.7	3.7 ± 0.6	<0.0001	<0.0001	n.s.

Low income group only (Monthly income <\$500)							
	African-Americans	Caucasians		Sig. due to:			
	FSP-Participants n=132	Non-Participants n=183	FSP-Participants n=183	Non-Participants n=605	FSP-participation	Race	Interaction
Economic Well-being	2.5 ± 1.1	2.7 ± 1.0	2.9 ± 1.0	3.3 ± 0.9	0.0001	<0.0001	n.s.
Independent living	3.4 ± 0.9	3.6 ± 0.8	3.5 ± 0.8	3.7 ± 0.8	0.0008	0.0454	n.s.
Social Well-being	3.6 ± 0.6	3.7 ± 0.6	3.4 ± 0.7	3.7 ± 0.6	0.0001	0.0171	n.s.
Psychological Well-being	3.5 ± 0.7	3.7 ± 0.7	3.6 ± 0.7	3.8 ± 0.6	<0.0001	0.0161	n.s.
Quality of Life*	3.1 ± 0.7	3.3 ± 0.7	3.3 ± 0.7	3.6 ± 0.6	<0.0001	0.0001	n.s.

Note: 5, very satisfied; 4, satisfied; 3, neither; 2, dissatisfied; and 1, very dissatisfied.

*Average of economic, independent living, social and psychological well-being.

Table 5: Nutrient intakes (in % RDA) of rural elderly based on FSP participation status (Mean \pm SD)

	All participants					
	<u>RR4</u>		<u>RR6</u>		FSP Participants n=371	Non-Participants n=1183
	FSP Participants n=413	Non- Participants n=2344	p	p		
Energy	65 \pm 28	68 \pm 28	0.0800	68.6 \pm 29.8	77.5 \pm 35.3	<0.0001
Protein	105 \pm 52	109 \pm 51	0.1272	121 \pm 78	132 \pm 117	n.s.
Niacin	166 \pm 86	184 \pm 92	0.0002	130 \pm 101	142 \pm 110	n.s.
Vitamin A	119 \pm 152	141 \pm 181	0.0148	131 \pm 150	132 \pm 158	n.s.
Vitamin C	140 \pm 147	158 \pm 136	0.0140	142 \pm 138	165 \pm 142	0.0072
Thiamin	95 \pm 53	107 \pm 62	0.0003	121 \pm 104	132 \pm 68	0.0131
Riboflavin	106 \pm 59	122 \pm 77	<0.0001	114 \pm 77	125 \pm 76	0.0149
Folate	82 \pm 57	112 \pm 75	<0.0001	109 \pm 81	129 \pm 103	0.0011
Calcium	65 \pm 43	72 \pm 46	0.0044	65 \pm 43	73 \pm 46	0.0056
Phosphorus	105 \pm 51	113 \pm 54	0.0017	113 \pm 59	127 \pm 71	0.0006
Magnesium	46 \pm 24	52 \pm 26	<0.0001	69 \pm 35	79 \pm 42	<0.0001
Iron	96 \pm 57	110 \pm 68	0.0001	102 \pm 62	119 \pm 75	<0.0001
Zinc	48 \pm 29	52 \pm 30	0.0102	60 \pm 40	68 \pm 63	0.0226
Vitamin D				54 \pm 102	50 \pm 65	n.s.
Vitamin E				114 \pm 90	130 \pm 106	0.0055
Vitamin B12				183 \pm 301	218 \pm 486	n.s.
Vitamin B6				80 \pm 99	91 \pm 67	0.0184

Table 6: Nutrient intakes (in % RDA) of income matched rural elderly based on FSP participation status (mean \pm SD)

	Income matched (Monthly income <\$500)					
	RR4		RR6			
	FSP Participants n=316	Non-Participants n=789	p	FSP Participants n=293	Non-Participants n=380	p
Energy	65 \pm 28	64 \pm 26	n.s.	69.2 \pm 31.6	76.8 \pm 35.2	0.0051
Protein	106 \pm 54	104 \pm 53	n.s.	124 \pm 86	132 \pm 104	n.s.
Vitamin A	123 \pm 163	137 \pm 202	n.s.	133 \pm 156	119 \pm 136	n.s.
Vitamin C	146 \pm 158	145 \pm 126	n.s.	146 \pm 147	157 \pm 148	n.s.
Thiamin	95 \pm 55	101 \pm 58	n.s.	122 \pm 117	126 \pm 69	n.s.
Riboflavin	107 \pm 61	119 \pm 80	0.0155	133 \pm 108	143 \pm 109	n.s.
Niacin	167 \pm 90	173 \pm 90	n.s.	132 \pm 99	141 \pm 102	n.s.
Folacin	82 \pm 58	90 \pm 70	n.s.	111 \pm 87	123 \pm 79	n.s.
Calcium	65 \pm 44	68 \pm 44	n.s.	66 \pm 43	68 \pm 45	n.s.
Phosphorus	103 \pm 52	106 \pm 53	n.s.	114 \pm 63	123 \pm 70	n.s.
Magnesium	48 \pm 25	49 \pm 25	n.s.	69 \pm 36	76 \pm 39	n.s.
Iron	95 \pm 59	102 \pm 68	n.s.	103 \pm 67	116 \pm 77	n.s.
Zinc	49 \pm 30	50 \pm 29	n.s.	62 \pm 44	66 \pm 50	n.s.
Vitamin D				60 \pm 116	47 \pm 61	n.s.
Vitamin E				114 \pm 94	130 \pm 118	n.s.
Vitamin B6				83 \pm 113	91 \pm 70	n.s.
Vitamin B12				177 \pm 256	191 \pm 367	n.s.

Table 7: Number of daily servings by food groups consumed by rural elderly (mean \pm SD).

All participants						
	RR4			RR6		
	FSP Participants n=413	Non- Participants n=2344	p	FSP Participants n=371	Non- Participants n=1183	p
	3.3 \pm 2.0	3.4 \pm 1.9	n.s.	3.5 \pm 1.6	3.9 \pm 1.9	0.0007
Grain/Bread/Pasta/Cereals	1.0 \pm 1.2	1.3 \pm 1.3	0.0011	0.9 \pm 0.9	1.0 \pm 0.9	0.05
Milk/Cheese	2.2 \pm 1.8	2.1 \pm 1.6	0.0564	1.6 \pm 1.3	1.6 \pm 0.9	n.s.
Meat/Poultry/Fish*	2.2 \pm 1.8	2.1 \pm 1.6	0.0564	1.6 \pm 1.3	1.6 \pm 0.9	n.s.
Legumes				0.2 \pm 0.5	0.3 \pm 0.6	n.s.
Vegetables*	3.1 \pm 2.5	3.6 \pm 2.7	0.0002	2.3 \pm 1.7	2.8 \pm 2.0	<0.0001
Fruits				0.9 \pm 0.9	1.2 \pm 1.2	0.0001
Income matched (Monthly income <\$500)						
	RR4			RR6		
	FSP Participants n=316	Non- Participants n=789	p	FSP Participants n=293	Non- Participants n=380	p
	3.2 \pm 2.0	3.4 \pm 2.0	n.s.	3.5 \pm 1.6	3.8 \pm 1.9	0.0339
Grain/Bread/Pasta/Cereals	1.1 \pm 1.2	1.2 \pm 1.2	n.s.	0.9 \pm 1.0	0.9 \pm 0.9	n.s.
Milk/Cheese	2.2 \pm 1.8	2.0 \pm 1.7	0.042	1.6 \pm 1.3	1.6 \pm 0.9	n.s.
Meat/Poultry/Fish*	2.2 \pm 1.8	2.0 \pm 1.7	0.042	1.6 \pm 1.3	1.6 \pm 0.9	n.s.
Legumes				0.2 \pm 0.6	0.2 \pm 0.6	n.s.
Vegetables*	3.3 \pm 2.6	3.5 \pm 2.6	n.s.	2.4 \pm 1.7	2.7 \pm 1.9	0.0096
Fruits				0.9 \pm 1.0	1.1 \pm 1.1	n.s.

*For RR4, vegetables and fruits were combined, and meat/poultry/fish included legumes.

Table 8: Quality of diet consumed by FSP participants and non-participants (mean \pm SD).

All participants						
	<u>RR4</u>		<u>RR6</u>			
	FSP Participants n=413	Non-Participants n=2344		FSP Participants n=371	Non-Participants n=1183	
Indices of diet quality*						
DAS	38.5 \pm 22.1	44.7 \pm 23.2	<0.0001	41.3 \pm 26.8	48.6 \pm 27.7	<0.0001
DMS	46.9 \pm 30.3	48.0 \pm 30.4	n.s.	54.7 \pm 31.1	54.4 \pm 32.8	n.s.
DSI	42.8 \pm 17.0	46.4 \pm 16.8	<0.0001	47.9 \pm 16.7	51.5 \pm 17.7	0.0007
DQI**	7.8 \pm 2.5	7.4 \pm 2.5	0.0011	7.3 \pm 2.5	6.8 \pm 2.5	0.0008
Income matched (Monthly income <\$500)						
	<u>RR4</u>		<u>RR6</u>			
	FSP Participants n=316	Non-Participants n=789		FSP Participants n=293	Non-Participants n=380	
			p			p
DAS	39.4 \pm 22.2	42.7 \pm 23.1	0.0281	41.1 \pm 26.7	46.1 \pm 28.8	n.s.
DMS	46.3 \pm 30.4	49.7 \pm 30.6	n.s.	55.4 \pm 31.4	54.6 \pm 31.4	n.s.
DSI	42.9 \pm 17.3	46.2 \pm 16.9	0.0038	48.3 \pm 16.8	50.3 \pm 15.6	n.s.
DQI*	7.8 \pm 2.4	7.4 \pm 2.5	0.0339	7.2 \pm 2.5	6.9 \pm 2.5	n.s.

*DAS, DMS, DSI, and DQI denote, respectively, Dietary Adequacy Score, Dietary Moderation Score, Dietary Status Index, and Diet Quality Index.

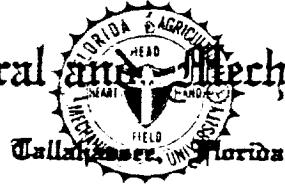
**Lower value indicates a better quality.

Table 9: Education, meal settings, and chronic health problems of income matched rural elderly based on FSP participation status (monthly income level <\$500).

	FSP Participants n=305	Non- Participants n=768	p
Education	1.8 ± 0.8	2.1 ± 0.9	<0.0001
Eat Alone, %	81.5	65.9	<0.0001
Meal skipper, %	27.5	16.5	0.0003
Prevalence of health problems:			
Diabetes	23.5	14.5	0.0003
Asthma	17.9	14.8	n.s.
Food Allergy	6.7	6.2	n.s.
Arthritis	70.4	67.0	n.s.
Heart problems	37.3	34.8	n.s.
Hypertension	55.6	47.7	0.0183
Kidney disease	22.7	17.6	0.0574
G-I problems	29.6	22.2	0.0104
Osteoporosis	8.4	5	0.0334
Cancer	6.4	4.3	n.s.
Physical Handicap	14.1	8.9	0.0113
Have to eliminate certain foods due to:			
Difficulty with Chewing	26.0	11.2	<0.0001
Difficulty with Swallowing	17.1	12.2	0.0279
Difficulty with Keeping Food Down	8.3	5.4	0.0675
Stomach Pain & Diarrhea	29.1	23.5	0.0485
Difficulty with Food Preparation	17.6	9.8	0.0002

Because of missing data on income level, the number of persons in each category differs from others.

Florida Agricultural and Mechanical University



Activity Title: "Rural Hispanic Participation in the Food Stamp Program in Gadsden County, Fl" Agreement # 59-3198-5-060

Sponsor: The Food Stamp Program
Grant/Agreement Amount : \$26,757

Prepared by: Dr. Lorraine J. Weatherspoon, R.D. & Dr. Dreamal H. Worthen
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September, 1995 - December 30, 1996

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ACKNOWLEDGMENTS

Dr. Stephen Leong

Associate Professor of Agricultural Business, Florida A&M University - Data Analysis Consultant who was invaluable for the completion of the study evaluation.

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1. Project Summary

NAME OF THE INSTITUTION: Florida A&M University

TARGETED NEED AREA: Food Stamp Program (FSP) in Rural Migrant Workers

TITLE: Rural Hispanic Participation in the Food Stamp Program in Gadsden County, Florida

Investigators: Lorraine Weather spoon, Dreamal Worthen & Dianna Edlow

Time line: September 1, 1995 - December 30, 1996

Type of Proposal: Research

The Food Stamp Program (FSP) was established to minimize the incidence of hunger and malnutrition in the U.S. particularly in underserved low socioeconomic populations. However, it is unclear whether all those in need of FSP assistance have been reached. The focus of this study was rural Hispanic residents, in Gadsden county, North Florida. This community has the lowest per capita income for the county in the state of Florida. This community was of particular interest to the investigators in the study because it included migrant workers whose FSP needs have not been adequately addressed in previous studies even though they often encounter abject living conditions and dire poverty. An in-depth interview was conducted in the population to determine: 1) the need for FSP assistance in this community; 2) the extent of participation; 3) aids and barriers to using food stamps; and 4) the quality of FSP participant purchases; and 5) alternative coping strategies used for those who do not receive food stamps. This study is unique in that there were no studies among those being currently conducted or those previously reported which specifically addressed the plight of the migrant worker, and whether their needs may have to be met in a different way to that currently being practiced in the FSP. Poverty, nutrition and health are closely interrelated. The findings from this study add useful insight into existing FSP practices in this community, and hence corrective measures which need to be undertaken. As anticipated, the outcome of this investigation brought the financial plight of Hispanic rural residents, more specifically the migrant worker to the fore. Discrepancies in food stamp program participation in the face of inadequate coping mechanisms were also identified. In addition, based on the literature with regard to rural poverty issues, another finding was that the lack of access to the FSP and poor food choices high in fat and low in fiber aggravate an already difficult situation. This documentation therefore facilitates the planning and implementation of a larger more in depth study, which will improve the quality of nutritional assistance and care for the migrant worker.

2. Conceptualization of the Project

2.1 Individuals Involved

The Research Director and Dean of the College of Engineering Sciences, Technology and Agriculture at Florida A&M University received a copy of FNS RFA 95-031BRC, and shared it with three faculty members who they felt would have the expertise to respond to the RFA. The three faculty members became the proposal development team, and met to discuss the feasibility of submitting a proposal, and area of focus. The Hispanic population in Gadsden County was of interest to all three researchers, based on their uniqueness in this region of Florida. Based on overall experience in the area, and research interests, the two co-principal investigators were agreed upon. Their overall responsibilities would include directing proposal development activities, initial proposal drafts, USDA communication, routing for review and comments, and rewrites. All three investigators participated in proposal review, groundwork and writing. Initial contact was made with the Food Stamp Office in Gadsden County, and an article, which mentioned the Panhandle Area Educational Cooperative (PAEC) Migrant Program set the wheels in motion for a viable partner in the target area (Appendix 1). The proposal development team identified all the individuals, who could serve as resources for the project.

2.2 Justification for the Study

The Food Stamp Program (FSP) is one of the programs that were developed by the U.S. government, with the underlying aim of protecting all citizens who are vulnerable to the harmful effects of hunger. One definite impact reported on low income populations who participate in the program, is more family food servings especially close to the time of issue (Taren et.al., 1990).

It has grown significantly in participation and cost, since its inception in the late 1960's (Scheffler, 1989; Allen, 1993). However, it has been difficult to estimate to what extent eligible potential clients do not participate and why. For example, statistics show that contrary to popular belief, food stamp households are small (1 or 2 people), predominantly white and receiving some income (Durant, 1988). Access to the field office may be a problem particularly in rural areas, and it has thus been suggested that a possible solution to this problem may be satellite offices, which are better able to monitor local situations (Tackett, 1989).

In addition, the quality of FSP recipients diets have been difficult to monitor and assess. Since food purchases are not limited to nutrient dense items, the quality of diets of some individuals may not be healthful or adequate. Although there is some evidence that participants in the FSP may have more nutritious diets than others in the same income bracket who are not participants, these findings are often associated with formal nutrition intervention. For example, the Expanded Food and Nutrition Program (EFNEP) has played a significant role in improving dietary habits of FSP participants (Lopez and Berce, 1989 & Derrickson and Gans, 1993). One of the primary goals of the Food Stamp Program, is to provide food purchasing power to low income households thereby improving their nutritional status. There is no doubt that the FSP has been beneficial (Bishop et.al., 1992; Devaney and Fraker, 1989; Devaney and Moffitt, 1991; Durant, 1988; & Scheffler, 1989).

The FSP in Gadsden County is located in Quincy, Florida and serves approximately 10,244 cases and their families. The per capita income in this population by race is: \$13,007 for whites; \$5,527 for blacks and only \$4,992 for Hispanics (Bureau of Economic Analysis, 1991). This county has the third highest poverty rate in the state (Florida Dept. of Commerce, 1994).

The per capita income of the Hispanic population is well below the poverty guideline of adequacy which is \$14, 800 for a family of four (DHHS, 1994).

Thus, the greatest need for FSP assistance is in this community. However, on reviewing the percentages of eligible recipients of food stamps for April, 1995 by race in Gadsden County, of the total 9,637, only 416 (4%) are Hispanic (HRS, 1995). There is therefore a disproportionate number of Hispanics, who do not receive Food Stamps, and a paucity of evidence for the non-participation in the food stamp program and coping mechanisms in this population group. The migrant population increases the population by approximately 5000 laborers and 1500 children each Spring (Appendix 1). Nutrition and the difference between health and illness in children cannot be overemphasized, coupled with the fact that food stamps have been shown to reduce deficiencies in children (Cook et.al., 1995 & Center on Hunger, Poverty and Nutrition Policy, 1995). In addition, given the escalating incidence of diet-related chronic diseases especially in low income minority populations, the researchers are interested in the food choices that these individuals make with the assistance received.

2.3 Objectives

The objectives of this study were to determine: 1) the need for FSP assistance in this community; 2) the extent of participation; 3) aids and barriers to FSP participation; 4) the efficacy of use of Food Stamps among those who participate; and 5) what alternative coping strategies if any are in place for those who do not receive food stamps. Hence, the circumstances and needs of these households were addressed as well as the factors that impact participation/ non-participation in the FSP and clients food choices in these two groups. This project was unique in that it included migrant workers in north Florida, who have not been previously studied.

3.Implementation of the Project

3.1 Research Questions

The primary questions which were of interest in this study were as follows: 1) To what extent did eligible persons not participate in the FSP in Gadsden county? 2) What were barriers or accelerants to participation; 3) Was knowledge of eligibility for Food Stamps a problem in this population; 4) How accessible was the FSP office; and 5) If receiving assistance, did these individuals make wise and healthy food selections?

3.2 Plan of Operation

A small exploratory survey was conducted using an in-depth survey questionnaire, adjusted accordingly after pilot testing in the target population. Questions asked can be viewed in (Appendix 2). In order to account for the fact that many of the subjects may have been illiterate, spoken only Spanish or experienced reading difficulty, trained interviewers (English and Spanish speaking) were used to conduct personal interviews for data collection. This also increased the response rate and facilitated communication. Those studied included a sample of Hispanics in Gadsden County, HRS District II, North Florida during the Spring and Summer of 1996. This period of time was selected because it is the peak period of migrant presence (Appendix 1). It was anticipated that consent would be obtained and data collected from 100 FSP participants and 100 non-FSP-participants.

The estimated time line for the implementation of the project from commencement to completion was 1 year from grant award. This period of time was divided into 3 equal periods for the planning, implementation and evaluation of the project. The time allocated was planned to allow for a slow start up and adequate program and process evaluation.

3.3 Project Progress

3.3.1 The First Quarter

During the first four months, the investigators addressed sample selection, development of the questionnaire, instrument pilot testing and finalization, identification of interviewers, and development of a training plan for the interviewers. The investigators also worked with the Gadsden County Food Stamp office to facilitate the proximity to program participants. Space was made available at the Food Stamp office for project interviewers to have easy access to participants during peak periods of stamp pick-up. In this way client "name" confidentially would be maintained by the Food Stamp office. The Food Stamp officials also made a commitment to direct the clients to the project interviewers.

Selecting a sample of food stamp non-participants required the assistance of several organizations in the community. In October, 1995 a meeting was held with representatives from the Catholic Social Services, an organization that works with the target population. Catholic Social Services compiled a list of potential community events, which should be held during the period of data collection (April through July). It was suggested that data collection would be facilitated by interviewing people during some of the organized events. In addition, several other liaisons were formed in order to identify potential study participants. Representatives of the Head Start Program agreed to allow the investigators to interview potential clients at one of their annual screenings, which was held from the end of March through the first week in April, 1995. During this event, there would be approximately 60 screenings. The Community Economic Development Organization (CEDO) for Gadsden county provided additional information and referral assistance for the project. They managed and supervised two complexes, which provided family housing for

a predominantly Hispanic migrant community. Each complex consisted of at least 60 units. Finally, a graduate student at Florida a&M University in the Division of Agricultural Sciences, is a native of the target area, and also assisted in identifying the sample. The Panhandle Area Educational Cooperative Migrant Program was not only useful with sample selection, they also helped to identify interviewers. The project required interviewers who spoke both English and Spanish..

With regard to the questionnaire development, the three investigators met several times to discuss the adequacy of the questions being asked, and to determine the most appropriate line of questioning for this target group. Several issues were raised such as the method by which economic and employment status questions should be asked, given the temporary nature of migrant work and the sensitivity in low income populations to these type of questions. It was decided that the study participants should be questioned about the amount they were paid per day, per week, biweekly, monthly, or by task. Additionally, the questionnaire would include method of payment, and how often the individual worked. An initial questionnaire was reviewed and completed by the investigators. The investigators also finalized an interviewer training plan.

3.3.2 The Second Quarter

During the second quarter (January through April, 1996) the focus of the project was the conduction of interviewer training, and finalization of the questionnaire. First, the questionnaire was pilot tested by 10 randomly selected Hispanic individuals at the Food Stamp Office in Quincy, Florida. The director of the Panhandle Area Educational Co-operative Migrant Program, who is extremely knowledgeable about the target population and area of interest, provided useful comments and suggestions. Assistance was not only provided with regard to content areas for the

questionnaire, but also with the identification and supervision of two reliable bilingual interviewers for the project. Both of these interviewers had a personal interest in the project, being Hispanic and former migrants themselves. Formal training of both the interviewers was conducted by the project faculty in Quincy, in conjunction with an area survey together with the interviewers. Interviewers were also formally introduced to the contact people in the area programs, described previously, which provided services of some sort to the Hispanic population.

3.3.3 The Third Quarter

During the third quarter of the project (April through June, 1996), interviewer training was completed after final corrections were made to the questionnaire, data collection began, as well as data coding and entry by student assistants. During the first and second quarters, one activity which required more time than anticipated was the finalization of the questions. The pilot test was completed in early April and some modifications had to be made in order to ensure that all the necessary data was collected as comprehensively as possible. The comments and suggestions faxed to the project investigators the USDA Contract Officer's Representative were much appreciated. Many of the suggestions were added to the questionnaire where appropriate. These were for example: the addition of wording to the questionnaire which assured the respondents that participation was voluntary and would be kept confidential; respondents were asked if they had ever applied for food stamps under the Food Stamp Service section; some of the suggested food coping mechanisms used in other USDA studies were added; and an additional option for how the respondent reached the grocery store was "walk." The final version of the questionnaire, which was implemented is attached (Appendix 1). It was decided that since the interviewers were fluent in Spanish, after clarifying the wording with the project staff and the director of the PAEC migrant

program, they would do the translation during the interview. This would decrease the necessity of translation back to English again for data entry, later analysis and interpretation. Actual data collection began the end of May, because the Food Stamp Office representative informed us that this was the busiest period of the month at the Food Stamp Office, and the most ideal time for access to numerous potential study participants.

Student assistants were taught how to do the coding of the questionnaires and data entry. During this period, 93 interviews were conducted, with a target date of July 12, 1996 for completion of data collection. The investigators realized at this point in time that the target date would need to be extended. Thus, the study goals remained reasonably on schedule, if no technical difficulties were encountered.

3.3.4 The Final Quarter

During this final period of grant implementation (July through September, 1996) data collection was completed, and analysis and evaluation was commenced. Grant extension to December 30, 1996 was also requested and granted. Data collection was completed by mid-August. This impeded the data analysis, since the investigators had hoped to have all the data collected and entered by the end of July. Data analysis was completed by November 30, 1996.

3.4 Data Analysis

The major intent of this project was to ascertain the extent to which FSP services for the rural migrant workers were available and utilized. Statistical Analysis Systems (SAS) for the personal computer version 6.04, 1996 was used to perform data analysis. The dependent variable for correlational analyses was food stamp participation versus non participation. Hence t-tests and chi-square analyses were used for bivariate comparisons as appropriate.

Variables of interest included basic socio-demographics including family; food purchasing practices; barriers or stimulants to participation in the program such as accessibility, knowledge of eligibility, cultural acceptance of welfare; attitudes; and food coping mechanisms when money or stamps were insufficient. One of the primary strengths of our evaluation was getting direct input from a large sample of the population.

The Food Frequency component of the questionnaire, which assessed eating and purchasing behavior was used to assess nutritional quality (high fat low fiber versus low fat high fiber) of the diet. High fiber included the following foods: whole fruit; lettuce or vegetable salad; potatoes (whole, baked or mashed); beans (baked, kidney or in chili); other vegetables; high fiber bran cereal; and dark bread such as wholewheat or rye. If the individual ate at least 4 foods from this list greater than or equal to 5 times per month, then the diet was categorized as high fiber. High fat included the following foods: hamburgers or cheeseburgers; beef steak or roast; fried chicken; hot dogs or franks; cold cuts, lunch meats, or packaged ham; non-diet salad dressings or mayonnaise; butter or margarine; eggs, bacon or sausage; cheese or cheese spread; whole milk; french fries, potato chips or ice cream; doughnuts, pastries, cake or cookies; and white bread including french, Italian, biscuits, and muffins. If the individual ate more than 9 of these high fat foods greater than or equal to 5 times a month, then the diet was regarded as being high fat.

Findings from the bivariate analyses resulted in two unconditional logistic regression models where food stamp participation versus non-participation was used as the dependent variable. Model 1 included information on food related practices, and Model 2 included personal and general information. These models generated parameter estimates for continuous variables and odds ratios (OR) for categorical variables as measures of magnitude of relationship.

4. Outcome Evaluation

4.1 Descriptive and Bivariate Analyses

4.1.1 General

General descriptive information is depicted Tables 1 and 2. As projected a total of 200 respondents participated in the survey. The majority were female (57.5%), and (42.5%) were male. FSP participants were also significantly more likely to be female ($p < 0.001$, Table 3). The mean age for non-food stamp participants was 24.9 ± 5.3 with a range of 17-43, and the mean age for food stamp participants was 28.6 ± 8.8 with a range of 17-68. This larger range among food stamp participants was significantly different from the non-food stamp participants ($p < 0.001$, Table 3). The mean income of the respondents who provided this information ($n = 75$) was extremely low at \$2,618 per year. This income was even lower than the per capita income for the Hispanic population in county of \$4,992, which in turn is well below the poverty guideline of \$14,800 for a family of 4 (Bureau of Economic Analysis, 1991 and DHHS, 1994).

As would be expected non FSP recipients were more likely to be employed ($p < 0.10$, Table 3). About half (50.5%) of those employed were employed full time Seasonal work was the major type of employment (79.2%), and as would be expected 71% were migrant. More than half (55.4%) of the respondents had an education which was middle school or lower. Only 14.7% had a high school, and 1.5% had a technical or associate degree. Therefor for the most part educational status was low. Interestingly, FSP recipients were more likely to have their own transport ($p < 0.05$, Table 3). Only 48.5% were married, and only 16.2% had a high school or higher education. Households (66% mobile homes) consisted of 4 or more people on average.

FSP households were significantly larger ($p < 0.001$, Table 3). Only 2 (1.1%) respondents said that they had health problems their household.

4.1.2 Findings related to Objectives

4.1.2.1 Objective 1 (The Need for Food Stamp Assistance in the Community)

The need for FSP in Gadsden County was evident from the responses received to the question: "Is the money you earn sufficient for food?" For those receiving food stamps 36 (34.6%) said no while for those not receiving food stamps 68 (65.4%) said that their income was sufficient. Table 3 shows that FSP recipients were significantly more likely to state that the household income was sufficient ($p < 0.10$). The majority of individuals receiving food stamps used the following strategies to supplement their food supply: borrow from relatives or friends 23 (32.4%), and use personal funds 38 (53.5%). When asked to describe the amount of food the household has to eat, 55 (57.9%) of those individuals receiving food stamps replied that they had enough to eat, 31 (32.6%) said that they sometimes did not have enough to eat, and only 4.2% (4) respondents stated that they did have not enough to eat all the time. It is interesting to note that while the respondents who were not receiving food stamps said that they were receiving enough to eat, only 38.71% stated that they had enough of the kinds of food they wanted compared to 61.29% of the FSP recipients ($p < 0.001$, Table 3).

Table 1 Personal and General Information for Total Sample

	<u>Number</u>	<u>Percent</u>
Age		
20 or less	31	15.0
21- 30	128	64.0
31- 40	30	15.0
41- 50	10	5.0
51 and above	<u>2</u>	<u>1.0</u>
Total	200	100.0
Sex		
Male	85	42.5
Female	<u>115</u>	<u>57.5</u>
Total	200	100.0
Educational Attainment		
None	8	4.1
Elementary School	24	12.2
Middle School	77	39.1
Secondary School	56	28.4
High School	29	14.7
Technical or Assoc. Degree	<u>3</u>	<u>1.5</u>
Total	197	100.0
Migrant Status		
Migrant	142	71.0
Non-Migrant	<u>58</u>	<u>29.0</u>
Total	200	100.0
Marital Status		
Married	97	48.5
Divorced	24	12.0
Widowed	8	4.0
Single	<u>71</u>	<u>35.5</u>
Total	200	100.0

Table 2 - Living, Employment and Health Status

	Number	Percent
Number of People in Household		
1- 3	63	31.5
4- 6	110	55.0
7- 940	<u>27</u>	<u>13.5</u>
Total	200	100.0
Type of Housing		
House	36	18.0
Apartment	30	15.0
Condominium	1	.5
Mobile Home	<u>127</u>	<u>63.5</u>
Total	194	97.0
Employment Status		
Employed	101	50.5
Unemployed	<u>92</u>	<u>46.0</u>
Total	193	96.5
Type of Employment (for those who were employed)		
Full time	56	55.4
Part-time	<u>45</u>	<u>44.6</u>
Total	101	100.0
Wage Earner Stability (for those who were employed)		
Year round	24	23.8
Seasonal	<u>77</u>	<u>76.2</u>
Total	101	100.0
Health Problems (in household)		
Yes	2	1.1
No	<u>188</u>	<u>98.9</u>
Total	200	100.0

Table 3 Significant Bivariate Findings for Differences between Food Stamp (FSP) and Non-Food Stamp (NFSP) Recipients

Chi-Square Analysis

<u>Variable</u>	FSP %	NFSP %	Chi-Square Value
FSP Knowledge	60.51	39.49	43.892****
Suff. of Household Income	58.33	41.67	3.207*
Sex	63.48	36.52	24.691****
Type of Food	61.29	38.71	18.953****
When Purchase Groceries	55.74	44.26	7.627**
Migrant Status	55.00	45.00	8.122**
Marital Status	55.67	44.33	3.931*
Employment Status	41.35	58.65	3.903*
Own Transport	53.42	46.58	5.431**

T-Test Analysis

<u>Variable</u>	FSP Mean\pmSD	NFSP Mean\pmSD	T Statistic
Age	28.7(\pm 8.8)	24.95(\pm 5.3)	-3.5972****
# People in Household	5.04(\pm 1.8)	4.05(\pm 1.4)	-4.2601****

* p<0.10

*** p<0.01

** p<0.05

**** p<0.001

4.1.2.2 Objective 2 (The Extent of Food Stamp Program Participation in the Target Population)

The data collected from the study revealed that of the 200 people surveyed 96 (47.8%) were food stamp recipients, and 104 were non-recipients. It is further noted that the largest number of recipients 45 (47.8%) had been enrolled in the program for less than 12 months, compared to 17% who were on the program for 13-24 months, 17.1% who were on the program for 25-36 months, and 18.1% who had been on the program for 37 months or more..

4.1.2.3 Objective 3 (Aids and Barriers to Food Stamp Program Participation)

The extent to which respondents participated in the food stamp program was largely determined by the aids and or barriers individuals encountered to the program. Of the 93 out of 96 people receiving food stamps who responded to the satisfaction question, 88 (94.6%) said that they were satisfied with the assistance service in the community while 5 (5.4%) were not satisfied. Those people who were not satisfied with the assistance in the community gave the following reasons: felt they were not receiving enough food stamps, the food stamps were not sufficient for the month, and for non-speaking English individuals, there was a language barrier. Knowledge about the FSP was significantly different for recipients (61%) versus non recipients (39%) ($p < 0.001$, Table 3). This was surprising because one would of expected that even if not receiving food stamps, the program would be pretty well known of in a low income community. Proximity to the FSP office may have been a contributory factor.

4.1.2.4 Objective 4 (Efficacy of Use of Food Stamps Among Participants)

The efficacy of people participating in the Food Stamp Program revealed that the food stamps provided did not last until the end of the month. Of the respondents, 45 (49.9%) stated

that their food stamps lasted until the end of the month, while 51 (53.1%) said that their food stamps did not last and that they used alternative methods to supplement their food supply.

4.2.5 Objective 5 (Coping Strategies When in Need)

Out of the 96 people who receive food stamps, 71 gave the following ways they supplemented their food supply; 38 (53%) used personal funds, 23 (32.4%) borrowed from relatives or friends, 6 (8.5%) used food from their personal garden, and 4 (5.6%) obtained money donations from churches and other organizations. Alternative coping strategies were also employed by the 104 individuals who did not receive food stamps. The following strategies were used: 26 (70.3%) borrowed from relatives or friends, 10 (27%) used personal funds sparingly and 1 (2.7%) obtained money donations from churches and other organizations.

4.1.3 Findings related to Research Questions

4.3.1 Research Question 1 (To what extent did eligible persons not participate in the Food Stamp Program in Gadsden County?)

Given the alarming mean income of \$2918 per annum for those who responded in the study, and the fact that there was no significant difference between FSP recipients and non recipients, non FSP recipients were most certainly eligible for food stamp assistance on financial grounds. The study revealed that ineligibility was not the only barrier that prevented individuals from participating in the Food Stamp Program. There were eligible people who did not participate for several reasons: 20 (20.2%) stated that they did not know how to apply for the program, 13 (12.1%) stated that they were afraid to apply and 30 (30.3%) had never attempted to apply to the program. There may have also been citizenship legality issues, which could not be addressed in this project in order to increase participation.

4.1.3.2 Research Question 2 (What were the barriers or accelerants to participation?)

Although 20 (20.2%) stated a lack of knowledge on how to apply for the program, 13 (12.1%) stated that fear of applying to the program and 30 (30.3%) stated that having never attempted to apply were barriers to participation. A positive incentive for the program was that 94.6% of those receiving food stamps stated that they were satisfied with the services. The majority 92 (95.8%) of those who were receiving food stamps knew how to get help from the food stamp office. However, it was surprising that 42 (42.4%) of those not receiving food stamps did not know about the food stamp program. In addition, 50.5% either did not know how to apply or had never applied, even though the overall salaries were so low. Domicile location may have had an impact on this phenomenon. In support of the value of the food stamp program, 54 (51.9%) stated that food stamps provided enough food, even though they were not always the kinds of food that were desired. Therefore, although there were barriers to participation in the program, there were also the accelerants that made participation in the program worth while.

4.1.3.3 Research Question 3 (Was knowledge of the eligibility for Food Stamps a problem in this community?)

The research revealed that although respondents gave lack of knowledge about the program as a possible reason for non-participation in the program, 20 (20.2%) indicated that lack of knowledge on how to apply was not a single major determining factor for non-participation in the program. Re-application(23.2%), and having never applied(30.3%) were other major factors associated with non-participation.

4.1.3.4 Research Question 4 (How accessible was the Food Stamp office?)

The food stamp office appeared to be extremely accessible given that 95.8% (92) of those who were receiving food stamps stated that they knew how to obtain information/help from the food stamp office. However, for those not receiving food stamps, the location of the food stamp office may have been a problem, and one issue not investigated could have been legality issues.

4.1.3.5 Research Question 5 (If receiving assistance, did these individuals make wise and healthy food purchase selections?)

The food data analysis is showed that in this population, regardless of whether food stamps were being received or not, eating a high fat low fiber diet was a big problem. More than half (73%) of all the respondents ate a low fiber high fat diet. This is definitely a major concern in this population, since chronic diet-related diseases are disproportionately high in the Hispanic population in general.

4.4 Multivariate Analysis

Findings from the two logistic regression models are depicted in Table 4 (Food Related Practices) and Table 5 (Socioeconomic Factors). When controlling for adequacy of food in the household, access to enough of the kinds of food which are desired, when groceries are purchased (sales or not), gender, and adequacy of income, non food stamp participants remained less likely to have knowledge about the food stamp program ($p < 0.01$; $OR = 0.02$). Food stamp recipients were more likely to have enough of the foods they desired, when controlling for food stamp program knowledge, sufficiency of food in the household, when groceries are purchased, gender, and adequacy of income ($p < 0.10$; $OR = 1.9$). Similarly, food stamp participants were more likely to purchase food items which were on sale than non food participants even when controlling for

food stamp program knowledge, amount of food in household, ability to purchase enough of the kinds of food desired, gender, and adequacy of income ($p < 0.10$; OR = 1.8). Gender, which was significantly different in the bivariate analysis remained significant, when controlling for food stamp program knowledge, amount of food in household, ability to purchase enough of the kinds of foods desired, when groceries were purchased, and adequacy of income. Females remained more likely to be food stamp participants ($p < 0.01$; OR = 2.9).

In Model 2 (socioeconomic factors), variables which were significantly different between food stamp non food stamp recipients were age, gender, migrant status, and number of people in household. Since age and number of people in the household were quantitative variables, odds ratios could not be used to describe the relationship. Parameter estimates are given in Table 4. It can however be concluded that, even when controlling for having transport or not, sex, migrant status, marital status, and number of people in the household, those receiving food stamps were significantly more likely to be younger than those who were not receiving food stamps ($p < 0.05$, parameter estimate = -0.0531). This relationship changed when compared to the bivariate findings, which suggested that FSP recipients were older. In essence, there was a wider range in age among food stamp recipients compared to non- FSP recipients in the univariate analysis. Similarly, even when controlling for having transport or not, age, sex, migrant status, and marital status, households of food stamp recipients were more likely to be smaller than those for non-recipients ($p < 0.10$, parameter estimate = -0.1913). This was definitely the opposite to the bivariate findings. However, the results of this study do support that of Durant, 1988 who found that contrary to popular belief, food stamp households were smaller with some income. This significance also changed in the model compared to the bivariate analysis. In model 2 gender

remained significant when controlling for means of transport, age, migrant status, marital status, and number of people in then household. Females were significantly more likely to be recipients ($OR = 3.8$; $p < 0.001$). Finally, when controlling for means of transport, age, marital status, and number of people in the household, non-food stamp recipients were significantly less likely to be migrant than food stamp recipients ($OR = 0.46$; $p < 0.05$). It must be remembered though that 70.5% of the total sample considered themselves migrant.

Therefore in summary when taking food related practices into consideration, food stamp recipients were more likely to know about the food stamp program, have the type of food that was desired in the household, purchase groceries when they were on sale, and be female. In addition, when socioeconomic factors were considered, food stamp recipients more likely to be younger, female, non-migrant, and have less people in the household compared to non-recipients.

Table 4 Unconditional Logistic Regression Model 1 (Food Related Practices)

<u>Variable</u>	<u>Probability</u>	<u>Odds Ratio</u>
FSP Knowledge	0.003***	0.02
Amt of Household Food	0.8998	1.03
Type of Food	0.0597*	1.9
When Purchase Groceries	0.0828*	1.8
Sex	0.0030***	2.9
Adequacy of Income	0.4658	0.8

Table 5 Model 2 (Socioeconomic Factors)

<u>Variable</u>	<u>Probability</u>	<u>Odds Ratio</u>
Transport	0.6098	0.82
Age	0.0291	a
Sex	0.0002	3.8
Migrant Status	0.0377	0.46
Marital Status	0.9320	0.97
# People in Household	0.0724	b

5. Limitations and Recommendations

The major limitation of this study was time. It is difficult to plan, implement and evaluate a research project, which involves primary data collection in the period of a year. Hence, the extension of the project end date to December, 1996 was most appreciated. Based on the glaring need for nutritional assistance in this community (both quantitatively and qualitatively), and the growing national statistics which highlight disproportionately high rates of diet-related chronic diseases in the Hispanic population compared to whites, more in depth intervention research needs to be done. It is the strong contention of the investigators of this study that nutrition intervention can and does work, and the co-operation received by service and governmental organizations in this area, would make this one of the ideal locations to focus educational as well as financial assistance efforts. This predominantly migrant population especially those not receiving food stamps is in dire need of education about the program with regard to the benefits, eligibility, access, and application procedures. Young females in the community would be an excellent group to focus on. a more in-depth study of food purchase habits, and habits in conjunction with an intense nutrition education program will also be extremely beneficial.

6. Fiscal Analysis

All funds were utilized except for approximately \$25-\$30 remaining from funds set aside for travel to Washington D.C. to meet with the funding agency. Funds were spent as allocated. An institutional detailed account of expenditures may be viewed in the report submitted by Contracts and Grants at Florida a&M University.

REFERENCES

- Allen, J. The food stamp program: its history and reform. Public Welfare, Winter 1993, 25-26.
- Bishop, J.A., Formby, J.P. & Zeager, L.A. Nutrition an non-participation in the US food stamp program. Applied Economics, 1992, 24:945-949
- Bureau of Economic Analysis, 1990 U.S. Census, 1991, Gainesville, FL
- Center on Hunger, Poverty and Nutrition Policy. Statement on the Link between Nutrition and Cognitive Development in Children, 1995, Tufts University School of Nutrition, Medford, MA
- Cook, J.T., Sherman, L.P. and Brown, J.L., Impact of food stamps on the dietary adequacy of poor children, Center on Hunger, Poverty, and Nutrition Policy, Tufts University School of Nutrition, June, 1995, Medford, MA
- Derrickson, J.P. & Gans, D.A. EFNEP - food stamp pilot nutrition education project. Journal of Nutrition Education, 1993, 25:367A
- Department of Health and Human Services, Annual update of the HHS poverty guidelines, Federal Register, 1994, 59:6277-78
- Devaney, B. & Fraker, T. The effect of food stamps on food expenditures: an assessment of findings from the nationwide food consumption survey. American Journal of Agricultural Economics, 1989, 71:99-104
- Devaney, B. & Moffitt, R. Dietary effects of the food stamp program. American Journal of Agricultural Economics, 1991, 73:202-211
- Durant, D. Food stamps: shadows from the past, the shape of the future. Food and Nutrition, 1988, 18:7-9
- Florida Department of Commerce, Division of Economic development, Florida County Comparisons, 1994, Tallahassee, FL
- Health and Rehabilitative Service (HRS), Adhoc Reports from Florida Systems, 1995, Tallahassee, FL
- Lopez, L. & Berce, M. Food stamp use and the nutrition practices of participants in the Colorado expanded food and Nutrition education program. Journal of the American Dietetic Association, 1989, 89:1312-13

Scheffler, W. We've come a long way in 20 years. Food and Nutrition, 1989, 19:3-9

Tackett, C. The local connection: field offices play an important role. Food and Nutrition, 1989, 19:21-2

Taren, D.L., Clark, W., Chernesky, M. & Quirk, E. Weekly food servings and participation in social programs among low income families. American Journal of Public Health, 1990, 80:1376-78

Appendix 1
Tallahassee Democrat Article on Migrants in Gadsden County

JUNE 12, 1995

TALLAHASSEE DEMOCRAT

JUNE 12, 1995

CLASSIFIEDS, 7C



SPECIALS

For state workers: The state's awards program recognizes the accomplishments of its employees. 7C



For parents: A toddler saved her mother's life by alerting police that she had been locked in the trunk of her own car. 3C

For wedding-goers: Despite a ceremony's no-show bride or groom, Ann Landers advises that the reception must go on. 5C

She helps those in a world she was spared

Summer is a busy time for Maria Pouncey and the Panhandle Area Educational Cooperative's migrant program.

By Karen E. Olson
DEMOCRAT STAFF WRITER

Maria Pouncey was born with blisters all over her body. Looking back 38 years later, the Leon County mother of two can say it was a fortunate affliction. Because she was a sickly baby, she didn't grow up on the road with her family of migrant farm workers.

But she hasn't abandoned her heritage. On a typical June day, you'll find her rounding up food,



CARING CONNECTION

acting as interpreter, arranging medical care or organizing school programs for the families who harvest Gadsden County tomatoes.

She understands the challenges facing a laborer who toils from sunup to sundown, sometimes for as little as \$5,000 a year.

"My mother was working in the fields in Texas right up until I was born," Pouncey said. "I was one of 17. Because of the heat and the pesticides, I was born with blisters all over my body. I couldn't even



Pouncey

"They don't ask for donations," she says of the migrant laborers. "They just want to work."

eat — they had to feed me with a dipper."

When her mother left to follow the potato crop, the ailing newborn was taken in by an aunt and uncle.

"That's how I was fortunate enough to be educated, because the rest of my sisters and brothers weren't," Pouncey said. "That's why I feel the need to come back and serve those who didn't have

MORE WAYS TO HELP

- Without an electric scooter, she's stuck. 2C
- A program helps people reach financial economic self-sufficiency. 2C

that chance. That makes it easier for me to get up and go."

This is the busy season for Pouncey and her colleagues in the Panhandle Area Educational Cooperative's migrant program.

At least 5,000 laborers and 1,500 children visit the Quincy area each spring. Some sleep in trucks; others rent rundown shacks with exposed wiring and holes in the floor.

Please see CARING, 2C

CARING: The American Lung Association and Elder Care Services can help with Father's Day

From 1C

"They don't ask for donations," Pouncey said. "They just want to work."

About a dozen agencies, hospitals and churches have joined forces to ease the visitors' hardships. Last week, for example, Catholic and Baptist churches sponsored a free dental clinic in Greensboro. Next week, a Pensacola hospital will send a mobile medical clinic to eight area sites.

And for the next six weeks, 300 children will meet at Quincy's George Munroe Elementary School for an intensive dose of tutoring — supplemented by swimming, Scouting and 4-H Club projects.

"We try to give them every possible outlet so they can get a different view of life, so they can have a choice," Pouncey said.

At the same time, she said: "We understand that the family needs to survive. So we try to provide things like work-study programs."

She'd welcome volunteer help as well as donations of school supplies, swimsuits and craft materials. For details, call 875-3806.

IN BRIEF

Hit the coast this weekend for gumbo and good times

For years, Barbara Kurtz has made it a point to hit the Carrabelle waterfront during the Big Bend Saltwater Classic.

She doesn't have time to enter the fishing tournament, but she enjoys the street-party atmosphere.

"Last year, I entered the gumbo cook-off, just on a whim," said the Carrabelle mother of three. "It was the first gumbo I'd ever made, and I ended up coming in seventh."

couldn't when she started."

Her husband, John, spends an hour a day driving Linsie to and from day care before his night job as a cook. If the new center hadn't opened, the parents doubt they would have trekked to the flagship school Tallahassee.

"We've had to replace both CV joints on the front of the van," the mother said. "We've been through a set of tires. We haven't even owned this van for a year, and we've already put 40,000 miles on it — mostly with school and therapy."

Now a Dick Flawser enthusiast, Kurtz is coordinating this year's gumbo cook-off. Events run Friday through Sunday. Call 386-3474.

Gifts for a dad who golfs or who has everything

The American Lung Association has a good deal on its Golf Privilege Card, which offers free or reduced fees at 575 golf courses. Buy one for \$25 by June 30, and get one free. Call 386-2065.

If you send a check to Elder Care Services, the agency will give your dad a card acknowledging the gift. For details, call 575-9694.

800 pairs of rubber gloves and other disaster relief

With so much wet weather last week, it seems like a good time to check back with the Salvation Army's mobile canteen crew.

In February, you may recall, the Tallahassee office unveiled a glistening new disaster-relief van with the latest kitchen gear. Canteen volunteers ...

CASE OF THE WEEK

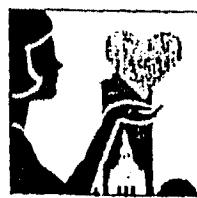
An electric scooter is her tic

You can provide yard-sale goods to help nurses at Gadsden Memorial Hospital help a stroke victim.

By Karen E. Olson
DEMOCRAT STAFF WRITER

First the rehab center lost the woman's artificial leg.

Then the staff sent her home with a manual wheelchair — the kind you need two hands to maneuver. It wasn't much use to a 63-year-old woman who's recovering from a stroke and whose left arm is paralyzed.



CARING CONNECTION

Shocked by the patient's treatment last year at another facility, nurses at Gadsden Memorial Hospital are rallying to buy her an electric scooter. In addition to soliciting cash, they'd welcome items for a money-raising yard sale.

After many attempts to get a scooter through Medicaid, the nurses are fed up with red tape.

"Everybody says the same thing — 'Oh, she should be eligible,'" said Brenda Kiff, a home-health-care nurse with the Quincy hospital. "But we can't find anyone to pay for it."

She has been equally frustrated by attempts to reach the out-of-town facility accused of misplacing her client's artificial leg: "No one has ever returned our calls."

Still, the woman is eager to get out and around — to attend church services, to enroll in Easter Seal classes, to visit the fishing pond on her family's 80-acre tract.

"You should just see how her face lights up when she talks about going fishing," Kiff said. "Sometimes I think people just look and see a wheelchair and think, 'Well, they can't do certain things.' It's not like that at all. . . .

"You still have the same wants. You still want to go fishing. You still want to go dig around the flower garden. You still want to browse in the store."

She described her patient as hard-working and independent: "She raised three children, and took care of their children, and worked in the tobacco fields. And when you work tobacco, you work sunup to sundown — rain or shine."

The woman has a ramp on her trailer. But without a power source at her fingertips, she must rely on relatives to push her everywhere.

"She never really can be alone," Kiff said. "She has to constantly depend on people. She can't go from room to room. She can't even go a couple of inches."

If she can get enough money, the nurse would like to get her client an electric hospital bed so she can sit up or lie down at will.

Kiff's colleagues are planning a yard sale at a date yet to be determined. Meanwhile, Easter Seal has offered \$100 and the hospital women's auxiliary has pledged \$200 toward a three-wheeler. Kiff would like to hear from anyone who's self-

PEOPLE IN ACTION

- Organization: Lively
- Program: "It's My Turn"
- Phone: 487-7569 or 487-7569
- Purpose: To help single women achieve economic independence at least \$7 an hour — commercial artists, crafters
- Background: Program Congress made funds available in year's \$71,000 budget for books and transportation
- Participants: In a typical year, 200 people receive services; women, ages 18-62, including candidates from Florida
- Perspective: "Educating women to climb out of poverty, providing counseling and encouragement at the end of the tunnel," says Claire Lovell, program director
- Success story 1: "I was divorced. I've got two kids. I problems. I was working, quit to take care of my son. I became independent. Now I'm able to go to Lively because my schedule as my daughter's school. . . . Some of the pressure of having two kids helped me with gas money where we could share some of the problems. It helped us to do what we wanted to do." — Mary, 42, who used computers for a human resources department
- Success story 2: "I was struggling to raise my kids. I was in a situation where I was going to jail because my money had been taken. I worked it out so I was able to get a job. I got a job at a day care. Just taking care of my kids. I'm getting my self-esteem back. If it weren't for the program, I wouldn't have a job. Job offers came through there." — Yondereka Green, 25, who got a job at a day care

Appendix 2
Study Questionnaire

**"Rural Hispanic Participation in the Food Stamp Program
in Gadsden County, Florida"**

Your participation in this study is completely voluntary. Any information you provide will be kept strictly confidential. I would like to ask you a few questions about the food you eat , the food stamp program, and some general things. Your answers may help us to better understand the problems you encounter with The Food Stamp Program and additional needs you may have. Please try to remember your situation as close as possible to the way it usually is, so that we can use this information to improve the services and education for food stamp recipients. You are welcome to ask questions about any concerns you may have or make comments preferably at the end of the interview. Would you like to assist us? If respondent says yes then proceed.

QUESTIONS ABOUT FOOD

Think about your eating habits over the past month. About how often do you eat each of the following foods. Mark an "x" in one box for each food. Please mark only one box for each food.

	Less than once per MONTH	2-3 times per MONTH	1-2 times per MONTH	3-4 times per MONTH	5+ times per MONTH
1. Hamburger or cheeseburgers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Beef, such as steak, roast	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Fried chicken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Hot dogs, franks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Cold cuts, lunch meats, ham, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Salad dressing, mayo (not diet)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Margarine or butter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Eggs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Bacon or sausage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Cheese or cheese spread	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Less than once per MONTH	2-3 times per MONTH	1-2 times per MONTH	3-4 times per MONTH	5+ times per MONTH
11. Whole milk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. French fries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Potato chips, corn chips, popcorn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Ice cream	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Doughnuts, pastries, cake and cookies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Orange juice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Not counting juice, about how often do you eat any fruit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Lettuce or vegetable salad	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Potatoes (Whole, baked, or mashed)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Beans, such as baked beans, kidney beans, or in chili	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. About how often do you eat any other vegetables?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. High fiber bran cereal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Dark bread, such as whole wheat or rye	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. White bread, including French, Italian, biscuits, muffins	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FOOD STAMP SERVICE

25. Do you know about the Food Stamp Program?

Yes _____

No _____

26. Do you or your family receive Food Stamps now?

Yes _____

No _____

27. If no, then why?

- Nobody in the family is eligible
- I am in the process of reapplying
- I do not know how to apply
- I do not need food stamps
- I am afraid to apply
- I have never applied

Questions 28 - 31 only apply to those who receive Food Stamps

28. How long have you or your family been receiving Food Stamps?

_____ months

_____ Yrs.

29. Are you satisfied with this assistance service in your community?

_____ Yes (1)

_____ No (2)

30. If No, then Why?

31. Do you know how to get help from the Food Stamp Office?

_____ Yes

_____ No

Food Coping Mechanisms for those receiving Food Stamps:

32. Does the food you buy with your food stamps last until you receive more food stamps?

_____ Yes

_____ No

(If respondents answers no, go to the next question.)

33. How do you manage until you receive more food stamps?

- Borrow from relatives or friends
 - Use personal funds
 - Use foods from my personal garden to supplement food purchases
 - Obtain food from gardens of neighbors or friends
 - Use foods from my employer
 - Obtain money donations from churches and other organizations
 - Use community food banks
 - Other(specify) _____
-
-

Food Coping Mechanisms for those not receiving Food Stamps:

34. Is the money you earn sufficient for food?

- Yes No

(If respondent answers no, go to the next question.)

35. How do you manage if you do not receive food stamps?

- Borrow from relatives or friends
 - Use personal funds sparingly
 - Use foods from my personal garden to supplement food purchases
 - Obtain food from gardens of neighbors or friends
 - Use foods from my employer
 - Obtain money donations from churches and other organizations
 - Use community food banks
 - Other(specify) _____
-
-

General Coping Questions for both Food Stamp and Non-Food Stamp Recipients

36. Which of the following best describes the amount of food your household has to eat?

- enough food to eat
- sometimes not enough to eat
- often not enough to eat
- Don't know
- refused to answer

37. Do you have enough of the kinds of food you want to eat, or do you have enough but not always the kinds of food you want to eat?

- enough of the kinds you want
- enough, but not always the kinds you want
- don't know
- refused

38. I am going to read a list of some of the other forms of assistance or benefits that some people use to get food. During the past 30 days, did you or anyone in your household receive any of the following.

Interviewer answer as follows: 1 - yes 2 - No 7 - Don't Know 8 - Refused to answer

- free or reduced cost meals for the elderly
- free or reduced cost meals at school
- free or reduced cost food at a day care center or Head Start Program
- food through WIC (that is the Women Infants and Children Program)
- food or vouchers to buy food such as cheese, butter, rice or honey from another program

FOOD PURCHASING HABITS

39. Where do you usually do you main grocery shopping? (Put a "1" by the one used the most and a "2" by the one used next frequently, and a "3" by the the third choice)

- Supermarket
- Neighborhood Store (Smaller than a supermarket)
- Convenience Store(Examples: Minit Mart, Suwanee Swifty)
- Farmer's Market
- Meat Market
- Fish Market
- Warehouse(Example: Sam's Wholesale Warehouse)

40. Are there other stores you prefer to shop at? Yes No

41. If yes, why don't you shop there? _____

42. Do you buy your main groceries when sales are available?

Yes No Sometimes

43. How far is the grocery store from your home? _____ Miles

_____ Blocks

44. How do you usually get to the store to do your main grocery shopping?

- Walk
- Use own car
- Ride with a neighbor, family member or friend for free
- Pay someone to take me to the store (How much? _____)
- Send by someone
- Other(Please specify.)

PERSONAL & GENERAL INFORMATION

45. How old are you? _____ yrs

Interviewer the next question can be completed without actually asking the respondent unless it is really unclear

46. Are you male or female?

47. What is the highest level of education you have completed?

- none
- elementary school
- middle school
- secondary school
- high school
- technical or associate degree
- undergraduate college degree
- graduate college degree

48. Would you consider yourself a migrant?

Yes No

49. What is your current marital status?

Married Divorced Widowed Single

50. How many people are living in your immediate household? Number of people _____

51. What is (are) the relationship of this person or these people to you? Interviewer please put the number next to the applicable person or people.

- | | |
|---|---|
| <input type="checkbox"/> Spouse | <input type="checkbox"/> Father/Mother-in-law |
| <input type="checkbox"/> Brother/Sister | <input type="checkbox"/> Niece/Nephew |
| <input type="checkbox"/> Child/ren | <input type="checkbox"/> Grandchild/ren |
| <input type="checkbox"/> Parent | <input type="checkbox"/> Friend (no relation) |

52. What type of housing do you live in?

- | | |
|---|--------------------------------------|
| <input type="checkbox"/> House | <input type="checkbox"/> Condominium |
| <input type="checkbox"/> Apartment | <input type="checkbox"/> Mobile Home |
| <input type="checkbox"/> Other (Please specify) _____ | |

Income - One important factor that has an important impact on how we are able to live is income. We do not want a specific amount. Please answer the following questions as best as you can.

53. How would you rate your current income?

- | | |
|--|-------------------------------------|
| <input type="checkbox"/> very adequate | <input type="checkbox"/> Adequate |
| <input type="checkbox"/> Barely adequate | <input type="checkbox"/> Inadequate |

54. What was your last full time job or occupation? _____

55. Are you currently employed? Yes No

56. If yes, is the job Full-time? or Part-time

57. What is your current job/occupation? _____

58. Approximately how many hours per week does the main wage earner in your family work at your job? _____ hours

59. How much do they get paid ? Interviewer please state the amount in dollars.

\$/hourly \$/weekly \$/biweekly \$/monthly \$/piece

60. Do you or the main age earner in the home work all year round or only seasonally?

all year round seasonally

61. If seasonally, for approximately how many months would you say there is regular income in the home?

months

HEALTH PROBLEMS

62. Is there anybody in the family who has health problems, for which they have to take medicine **every day**?

Yes

No

63. If yes, specify who and for what condition?

64. Approximately how much of the family income would you say is spent on this need? **Interviewer please state the amount in dollars.**

\$/weekly

\$/biweekly

\$/monthly

Thank you so much for your time and patience. The information you have given us will be kept confidential, and submitted to people who are interested in making the Food Stamp Program more beneficial for you and all who are entitled to it's use. We would also like to help you and your family in whatever way we can to eat better. Should you have any questions or concerns, please contact us through the Panhandle Area Educational Cooperative.

**THE DETERMINANTS OF NON-PARTICIPATION OF
AFRICAN-AMERICANS IN THE FOOD STAMP PROGRAM IN
SELECTED ALABAMA BLACK BELT COUNTIES**

Grant/Agreement No.: 59-3198-6-043

Between the

United States Department of Agriculture Food and Consumer Service

And the

**George Washington Carver Agricultural Experiment Station
Tuskegee University, AL**

Submitted

July 14, 1998

By

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EXECUTIVE SUMMARY

The changing nature of the economy means that many people need additional support to maintain their families. The Black Belt Counties of the rural South have been especially hardest hit by this phenomenon. The Food Stamp Program (FSP) is one program that is used, or has the potential to be used, to assist many of these families. For the Black Belt Counties in Alabama, over one in five residents receive food stamp benefits. This is twice the state rate and three times the national rate for food stamp participation. Yet, despite the need for food stamp assistance, there is a large segment of the population who are eligible but who do not participate in the FSP.

The purpose of this study was to determine the socio-economic characteristics and strategies of eligible non-participants in the FSP in Macon County, Alabama. Specific objectives were: (1) to identify the characteristics and strategies of low income eligible non-participants in the FSP; (2) to determine reasons for non-participation and barriers to participation for intentional as well as non-intentional non-participants; and (3) to assess and evaluate the strategies used by intentional non-participants to sustain themselves in the absence of food stamp benefits. Frequency distribution and chi-square statistics were used to analyze survey data.

To address the objectives, a 75-item questionnaire (see appendix) was administered to eligible non-participants in the FSP. Given the difficulties of identifying this target group, the project worked closely with the Tuskegee Housing Authority. The targeted non-participants were low-income residents, young, elderly, and students.

In terms of characteristics of the non-participants, they were all low-income and African American. Almost two-thirds of the respondents were female; they ranged in age from 16 to 88 years; and 72 percent were single. Over half of the respondents were intentional (as opposed to non-intentional) non-participants. They typically had a high school diploma/GED.

In terms of barriers to participation, the major reason for non-participation by non-intentional non-participants was not knowing the appropriate eligibility criteria for the FSP. For intentional non-participants, it was primarily due to the lack of jobs in the Macon County area.

The strategy used by almost half of the non-participants needs used self-reliance for various food. While the survey found that most of the respondents relied mostly on themselves in times of food or financial need, 15 percent received food from a church, food pantry, soup kitchen, or food bank; five percent received some type of food voucher; but almost one-third still had experienced hunger. Finally, a previously overlooked food stamp eligible population is needy students. Often independent from their families, with pressure to do school work, job availability, and little time for employment, students living in an area with few job opportunities present another set of challenges to the changing welfare system in general and the FSP in particular.

In conclusion, non-participation in the FSP is due to lack of information and the overall poor economic conditions in the Alabama Black Belt. The Welfare Reform Law

could exacerbate non-participation if job opportunities are not significantly better, and the management of this program is not improved in the process of block granting it to the states.

INTRODUCTION

Background

The Food Stamp Program (FSP) can be traced as far back as the Great Depression. The decrease in food purchases forced many farmers to lose large quantities of unsold produce. The United States Department of Agriculture (USDA) attempted to combat this economic crisis by introducing the food stamp plan. The food stamp plan was originally developed to stimulate the agricultural economy by increasing the purchasing power of low-income people. It would aid the hungry by providing them with food. The food stamp plan was supported by farmers interested in increasing the demand for, and consequently the price of, agricultural commodities used as food or in food production. It was also supported by local governments concerned with acquiring the funding for assistance to the poor (Lane, 1995).

The food stamp plan was initially authorized under Section 32 of the 1935 Agricultural Act. It allowed eligible families to exchange money for food stamps, which were of equivalent value in order to purchase food items. In addition, participants received food stamps that were specifically designated to buy surplus food at retail stores (FCS, 1995). The food stamp plan aided millions of people and it covered almost half the country. Due to the reduction in food surpluses, the food stamp plan was terminated. Many researchers have generally concluded that USDA operated the early food assistance programs primarily to support farm prices and secondarily to meet the nutritional needs of the poor (Allen and Davis, 1989).

The FSP was re-authorized as the pilot food stamp project in May 1961. There were initially eight designated demonstration sites. The revival of the Social Welfare - Agricultural Coalition resulted in the passage of a Food Stamp Bill in 1964. Under the FSP, recipients could purchase any food item, not just those in surplus. Recipients were required to spend their entire allotment on food. This FSP steadily expanded and by January of 1968, it covered 83 sites in 22 states and it had an estimated 300,000 participants (FCS, 1995).

The FSP was implemented as a national entitlement program through the Food Stamp Act of 1968. Appropriation levels for the first year of the FSP were limited to \$75 million. It was administered through the USDA, but the actual implementation of the program was done by the states. They were required to provide food stamps to the needy in their jurisdiction. In other words, this was a joint effort by the federal and state governments to support the needy. The expansion of the FSP increased participation to encompass more than one million people by March of 1968.

The FSP was gradually expanded throughout the latter part of the 1960s. Concerns and awareness of hunger issues continued to alarm the nation's leaders. In 1969, a conference was organized on food, nutrition, and health. Recommendations were made to expand food assistance programs. USDA encouraged expansion and Congress increased appropriations. In 1973 both agricultural committees of Congress agreed to combine the Farm Bill with the FSP. Both programs received open-ended authorization for four years, and the FSP was implemented nation-wide (FCS, 1995).

In 1977, the FSP was expanded by limiting eligibility restrictions and by eliminating purchase requirements. Finally, eligibility became tied to the Federal poverty levels. These

measures were implemented to reduce barriers to accessing the FSP. Throughout the 1970s, food stamp appropriations increased. It was generally accepted that expanding the FSP in the 1970s played a large role in reducing hunger (Allen and Davis, 1989).

In 1980, the Farm Bill was separated from the FSP. In 1981, the FSP, along with other social welfare programs, encountered massive cutbacks through increased eligibility requirements. Recipients with earned income received reduced payments, people on strike became ineligible for the program, and monthly reporting for recipients was required. These measures aimed to reduce spending on the program by discouraging use.

The Personal Responsibility and Work Opportunity Act of 1996, (The Welfare Reform Act), became law on August 22, 1996 (FRAC, 1997). It contains numerous significant benefits and structural changes to the nation's nutrition assistance programs. The Welfare Reform Act cuts the FSP by over \$27 million over the next six years (FRAC, 1997) and thus drastically alters the whole history of the FSP. The FSP is now more restrictive. The food stamp benefit levels have been reduced three percent across the entire program. There are now time limits and work requirements such as able-bodied adults 18-50 years of age without dependents must work 20 hours a week to receive food stamp benefits. If the person is not working, they can only receive three months of benefits over a thirty-six month period.

The changing nature of the economy, especially for rural areas, means that many people need additional support to maintain a family in the current economic environment because entry-level jobs and part-time jobs do not pay enough to support a family. This situation is more grave in the rural South and Black Belt Counties (BBCs) than anywhere

(BBCs) than anywhere else (Falk and Lyson, 1988). BBCs are suffering from poor socio-economic conditions such as high poverty rates and high unemployment rates (Wimberly et al., 1992). As a result of low financial status of residents in these areas, there will always be a need for public assistance to meet the basic daily needs such as nutrition for the households and individuals living below the poverty line. The FSP has been for many years the major program used by individuals on welfare to meet this need.

Problem Definition

There are more than 20 million Americans who receive food stamp benefits. However, only 59 percent of people who are eligible actually participate in the program. Also, only 20 percent of the children that are eligible for food stamp benefits actually receive them (FCS, 1995). The reasons for non-participation have been categorized into two major groups: intentional and non-intentional. An intentional non-participant is a person who is eligible for food stamp benefits, and knows he/she is eligible, but who does not receive any food stamps. A non-intentional non-participant is a person who is eligible for food stamp benefits, but does not know he/she is eligible, and so does not receive any food stamps.

Recent legislative changes in the Welfare Reform have created new requirements that will more likely lead to new FSP eligible individuals not participating in the program. When the new legislation was first implemented, there were already millions of individuals nationally who were dropped from the FSP, but who were picked up later due to the temporary waiver in the new Welfare Reform Law. In February of 1997, for example, almost 100 thousand people were dropped from the FSP in Alabama. Indeed, childless adults

under the age of 50 and able to work, can get food stamps for only three months out of every thirty-six months. In the future, when the new bill is fully implemented, it is likely many individuals will be dropped and the non-participation rate will also likely go up. Knowing what the characteristics of today's non-participants are, and how these individuals fared in terms of providing for themselves with the basic food needs, might help in understanding the coping mechanisms needed for those soon to be in a similar situation.

Although there have been studies on non-participants of the FSP, most of them have been in urban settings. To the best of our knowledge, there have not been any studies on non-participants in rural areas in general, and those that are predominantly African American such as Macon County in particular. There is little known about participation in the FSP from the perspective of both the traditional non-participants and those who were temporarily dropped off the FSP due to new legislation. Notwithstanding the difficulties of reaching non-participants in general, this study will still provide critical and insightful information on the subject among poor African Americans and can serve as baseline data for future evaluative studies.

Purpose and Objectives

The purpose of this study was to determine the socio-economic characteristics and strategies of eligible non-participants in the FSP in Macon County, Alabama. Specific objectives were: (1) to identify the characteristics of low income eligible non-participants in the FSP; (2) to determine reasons for and barriers to participation for intentional as well as

non-intentional non-participants; and (3) to assess and evaluate the strategies used by intentional non-participants to sustain themselves in the absence of food stamps.

LITERATURE REVIEW

This section is organized into four sections. They are: reasons for non-participation, policies and outreach programs to increase participation, economic issues of the FSP, and effects of FSP reduction. The studies that are reported emphasize the traditional (urban) non-participant's perspective as opposed to non-participants in rural areas.

Reasons for Non-participation

There were various reasons why eligible households do not receive food stamps, but participate in other benefit programs. First, some households or individuals did not realize they are actually eligible for food stamps. It was well known that a large number of minorities eligible for the FSP did not participate. Blanchard et al. (1982), Coe (1983), Ohls (1985), the U. S. General Accounting Office (U. S. GAO) (1988), and Bartlett et al. (1992) all reported a non-participation range of 25 percent to 54 percent.

Second, some households believed they did not need the benefits. These eligible non-participants actually believed that others need food stamp benefits more than they need them. Ohls et al. (1985), U. S. GAO (1988), and Blaylock and Smallwood (1988) reported a range of 14 percent to 37 percent of eligible households who did not think they needed benefits.

Third, administrative requirements were deterrents to participation. The time and costs of traveling to a FSP office to apply for benefits, and the paperwork and reporting requirements associated with program participation, discourage eligible participants from

participating. Some of the administrative problems named by non-participants, include length of the application process or particular aspects of the application process, problems with getting to the office, confusion about the process, long waits at the office, and unobtainable documents required to verify the household's circumstances (Beebout and Ohls, 1993). Additional evidence from the U. S. GAO (1988) suggested that administrative factors may also affect the access to food stamp benefits and program accessibility. Some local offices have restricted operating hours, and some provide incomplete information on the application procedures when potential applicants first ask for information. Coe (1983), U. S. GAO (1988), Blaylock and Smallwood (1988) reported a range of eight percent to 27 percent where administrative requirements may act as a deterrent to participation.

Fourth, some households are embarrassed to use the benefits. Using food stamps to purchase groceries means that a household's participation in the FSP is evident to storekeepers and other shoppers. This is a stigma that most people would prefer to avoid (Beebout and Ohls, 1993).

Fifth, some households entitled to minimum benefit amounts sometimes do not bother to apply. An additional factor that may prompt an eligible household not to participate in the FSP, often in conjunction with other factors, is low levels of food stamp benefits. The participation rates fall as the food stamp benefits to which households are entitled decline. Participation rates are particularly low for the elderly, many of whom are eligible to receive only the \$10 minimum monthly benefit. Households eligible for low amounts of benefits have incomes near the cutoff point for eligibility (Beebout and Ohls, 1993). Blanchard et al.

(1982), Coe (1983), and U. S. GAO (1988) reported a range of one percent to 21 percent of the households entitled to low benefit amounts who sometimes do not bother to apply.

Sixth, homeless people have trouble meeting the documentation requirements for program participation. Homelessness is a significant deterrent to FSP participation. Mental health problems, transportation barriers, and problems in acquiring documentation all contribute to the problem for homeless non-participants. A recent national survey of homeless people revealed that, although virtually all respondents were eligible, according to their income responses, only 18 percent were receiving food stamps. Cited by Burt and Cohen it also showed that many local food stamp offices reported difficulty in determining the eligibility of homeless applicants due to the limited documentation that they can supply (Beebout and Ohls, 1993).

Despite several attempts to make the FSP efficient and effective, barriers to participation still prevail and participation rates are still low. For instance, in 1989, data on participation show that only 59 percent of eligible participants actually received them (US Senate Advisory Committee, 1993).

Policies and Outreach Programs to Increase Participation

Outreach is an obvious way to increase participation. During the late 1970s, states were required to engage in active FSP outreach activities, such as sponsoring publicity campaigns in the media and providing brochures and posters about the FSP (Beebout and Ohls, 1993). However, increasing concerns with hunger led to a provision of the 1987 Stewart B. McKinney Homeless Assistance Act which allowed federal matching funds for

states to provide information on the FSP to the homeless. The very next year, the Hunger Prevention Act of 1988 re-instituted the federal matching of outreach expenditures on a more general basis (Beebout and Ohls, 1993).

The federal government has, in recent years, also provided support for FSP outreach programs designed to enhance participation. The informational outreach programs were designed to inform eligible non-participants of their eligibility. According to Levedahl (1995), the success of informational outreach programs depends upon two factors: the proportion of outreach households reached and their response to the programs. He argued that the informational outreach programs are likely to increase participation among non-participants who do not think they are eligible.

The USDA awarded grants to nonprofit organizations to fund food stamp outreach demonstrations. These grants were targeted to rural, elderly and homeless populations, and impoverished working families with children. Some of the outreach methods included electronic media campaigns, use of local outreach workers and volunteers, facilitating access to food stamp agencies, training to enhance food stamp referrals, community presentations and education, pre-screening assistance for food stamp eligibility, individualized client assistance, and recruitment of authorized representatives for applicants during each certification period cited by Bartlett et al. (Beebout and Ohls, 1993).

Despite the many reasons that prevent participation in the FSP, some states, such as Delaware and Maryland, have been innovative in finding ways to reduce non-participation through the creation of a delivery framework, which is client-oriented and user-friendly. In One-Stop Shopping-Single entry multi-service facilities, public services and private human

services, with an emphasis on working with individuals and families to maximize convenience and efficiency, are located strategically through out the state of Delaware. The centers are both accessible and convenient to the clients. Clients need to travel fewer than five miles to get to the center. Also, an 800 number provides telephone assistance in obtaining information about the services.

Recent Assessment of the FSP

The FSP provides low-income individuals with the means to purchase a nutritionally adequate diet was cited by Blaylock et al. in 1996. As the largest federal welfare program, it caters to the monthly nutritional requirements of about 27 million people. The program is available on a national scale to all households on the basis of their financial status. For many low-income families, food stamps document the single major source of the family's total purchasing power. Major structural changes in food stamps are being envisioned to make the FSP more conversant with other public assistance programs.

According to Coe (1983), out of the many households eligible for the federal FSP in 1979, 86 percent actually received assistance. He also reports on the reasons for low participation. These were: administrative problems, lack of physical access, demographic factors, nonuse of other welfare programs, and attitudinal factors influential to low participation rates. Aggressive efforts at improving knowledge of specific eligibility rules and procedures for seeking assistance are imperative for policy planning on the FSP as well as other less well - publicized programs.

Isserman (1975) argued that common criticisms of the FSP are based on weakness in the design of the existing program rather than on intrinsic problems of the FSP per se. Thus, the criticisms are acceptable as arguments for modification but not for abolishment of the FSP. Isserman compares food stamps to an alternative of cash payment. Conditions are identified under which each program would be preferred. Though a cash payment program is a superior alternative to FSP, if a recipient is unable to wisely manage his or her welfare - maximizing purchases, the FSP may be preferable. Food stamps may also be preferred if they generate more benefits for the total society (Isserman, 1975).

SENSES (1996) reported that the FSP participants provide many interesting observations of the advantages and disadvantages they see in the FSP. Some of the advantages cited were the food stamps provide families with needed nourishment, cash can be stretched further when families are provided with food stamps, and food stamps provide families with proper nutrition, which is essential. Some of the disadvantages elicited were that the application process is too complicated, the process of getting food stamps is too long, and only food items can be purchased with food stamps.

SENSES (1996) further stated that the individuals and families that utilize the program are by far the best judges of how well the program operates. The program is obviously doing what it was designed to do by supplying low-income people with the means to purchase nutritious food. The question that still remains is if the program benefits are adequate. According to a majority of the recipients surveyed, the benefits are not adequate.

Due to the nation's new welfare legislation, tens of thousands of unemployed adults will begin to lose food stamp benefits across the United States. At the end of 1997, it was

estimated that over one million people would be affected by these changes. Of all the food stamp participants that will be affected by the new Welfare Reform Law, eighty percent of them are women, and one-third are over the age of 80.

Edelman (1997) argues that the Welfare Reform Law does not promote work effectively. While there was not much of a dispute on balancing the budget, the only deep multi-year budget cut actually enacted were those in the Welfare Reform Law, affecting low-income people. Many of the budget cuts were just cuts not reform (Edelman, 1997).

Close to home, the Welfare Reform Law is dramatically changing the FSP in the state of Alabama. Initially the food stamp changes were expected to affect up to 15,000 Alabamians. These people were to be dropped from the FSP. After the first application of the new FSP rules in 1997, nearly 100,000 recipients were no longer eligible to participate in the FSP (Montgomery Advertiser, 1997).

Effects of Food Stamp Program Reduction

FRAC (1997) reported that the food stamp cuts are likely to cause a rise in hunger. For instance, cuts in the FSP are four to five times the value of food currently distributed by Second Harvest, the nation's largest food bank network. Due to the federal cutbacks and budget restraints, the state and local governments and private charities are left to shoulder the burden.

Edelman (1997) argued that some of the damage will be obvious, more homelessness for example, with more demand on already strapped shelters and soup kitchens. There will be increased family violence and abuse against children and women. Consequently, a

significant spill over of the problem into the already over-loaded child-welfare system and battered women's shelters will most likely occur (Edelman, 1997).

Despite the size of the food stamp benefit reductions, little attention has been paid to their effect on the ability of poor households to purchase food. A survey by the Center on Budget and Policy Priorities assessed the magnitude of the food stamp benefit reductions that various types of low-income households would encounter, including families with children, the working poor, and the elderly. The study found the Welfare Reform Law reduced the average benefits and food purchasing power for all of these groups (Center on Budget and Policy Priorities, 1996).

Children and very poor families are affected most heavily since they are the primary beneficiaries of the FSP. More than half of the food stamp participants are children, and families with children receive 82 percent of the food stamp benefits. In addition, 97 percent of the food stamp benefits would go to households with gross incomes below the poverty line; more than half of the benefits would go to households with incomes below 50 percent of the poverty line (Center on Budget and Policy Priorities, 1996).

Beaulieu (1997) reported that the new Welfare Reform Law requires able-bodied adults between the ages of 18 and 50 who are not raising children unless those individuals are disabled, working at least 20 hours a week, or participating in certain kinds of employment and training programs. He also cited that if the person is not working, only three months of food stamp benefits can be provided over a three-year period. The benefit levels are reduced by three percent across the board.

Again, according to the Center on Budget and Policy Priorities (1996), once food stamp participants leave the program, most of them stay off. Only one-third of the food stamp participants returned to the FSP within a year. More than 100,000 of these individuals have registered for food stamp work or training programs, but they have not been placed in such programs because their state has not provided a sufficient number of work or training slots (Center on Budget and Policy Priorities, 1996).

The USDA Food and Consumer Service (FCS) and Economic Research Service (ERS) (1995) reported that the Work Opportunity Act of 1995 (Section 1120) drastically altered the FSP. Reduction in benefits would undermine the National nutrition safety net that has successfully narrowed the gap between the diets of low-income and other families. By changing eligibility rules and benefit levels, the proposed bill would reduce food stamp benefits by \$17 billion over five years (FCS and ERS, 1995). More than 1 million recipients would lose all benefits; virtually all others, including 18 million children and two million elderly, would receive less benefits (FCS and ERS, 1995). The impact of these reductions would be felt in communities across America. Poor rural and urban communities would be hit the hardest including reductions in food stamp benefits, a weakening of the food and agriculture economy, and losses in farm income (FCS and ERS, 1995). Reductions of this size could have profound consequences for the nutrition, the health, and the well being of millions of children, and working families (FCS and ERS, 1995). Half of all food stamp participants are children, over a quarter of all food stamp participants live in rural communities. Section 1120 would also take a major step toward abandonment of the

national health responsibility to ensure that people get the food stamp block grant (FCS and ERS, 1995).

METHODS AND PROCEDURES

This section is designed to present the data needs, and to discuss the development of the questionnaire, the data collection, and data analysis in order to describe the socio-economic characteristics and strategies of non-participants in the FSP. As such, means, frequency distributions, and measures of association will be used.

Data Needs

The two objectives related to characteristics of FSP non-participants and their strategies will require data that can be used to compute descriptive statistics. The third objective of assessing strategies will require further use of data to test selected hypotheses. The six hypotheses were developed as related to the significance between the different classes are as follows.

1. Reasons for and barriers to participation and the status of the non-participants are statistically independent.
2. Cash instead of food stamps and the status of the non-participants are statistically independent.
3. FSP recipients changing places of shopping and the status of the non-participants are statistically independent.
4. General assistance and the status of the non-participants are statistically independent.

5. Financial assistance and the status of the non-participants are statistically independent.
6. Employment status and the status of the non-participants are statistically independent.

Development of Questionnaire

The questionnaire was developed through a collaboration of various governmental surveys that were designed for the FSP and the State of Alabama Department of Human Resources (DHR) FSP application form. Questions were selected from these governmental surveys and the DHR application and formulated into a question bank. After refining the questions, the questionnaire was given to various individuals, the graduate committee, and the study's committee. The questionnaire was then revised according to the reviewers' recommendations and another draft was compiled. The questionnaire was then pilot tested. It had several sections: respondent's background, general household information, resources, incoming financial information, outgoing financial information, education, family background information, and employment and economic-related information. A copy of the questionnaire is found in Appendix A.

Target Population

Macon County is located in south central Alabama. Over one-third of Macon county residents live below the poverty level. One-fourth of the residents are already receiving food stamp benefits. Over half of the population is rural. Over 85 percent of the population are

African American. The per capita income in Macon County is almost half that of the United States. The County is dependent upon welfare programs in general, and the FSP in particular, to maintain a minimum safety net in the social and nutritional well being of its residents (AUM, 1995).

In 1996, for example, the Macon County Department of Human Resources provided approximately 2,700 households with food stamp benefits. For this study, it was estimated that there were 300 non-participants in the Tuskegee Housing Authority homes and other areas in Macon County. One-third of the total of 300 was considered adequate for this study and therefore, a sample of 100 households was the project goal.

Data Collection

Given the possible difficulties of tracking the non-participants, the investigator worked closely with the Tuskegee Housing Authority and the Macon County Department of Human Resources. The Department of Human Resources provided the new eligibility requirements. The Tuskegee Housing Authority provided a professional surveyor and a student assistant to help with the study. The Tuskegee Housing Authority also assisted with identifying the low-income eligible non-participants. The non-participants of the study that were targeted were low-income residents (young and elderly) and Tuskegee University off-campus students. These students generally use food stamps on a temporarily basis.

The process of identifying the individuals to be interviewed for the study was by snowball sampling approach. This approach is generally considered a non-probabilistic sample, but can be probabilistic if certain strategies are followed, thus allowing estimates of

sampling error and statistical test of significance (Bailey, 1982). It is an approach in which previous respondents recruit subsequent respondents. Snowball sampling is especially useful when you are trying to reach populations that are inaccessible or hard to find. It involved stages, which started by first identifying and interviewing the initial group of select heads of the households, and who were then utilized as informants for determining the subsequent groups. This process continued until a sample size of 61 was obtained.

Data Analysis

The data were analyzed using descriptive statistics -- frequency distributions and percentages. The chi-square test was used to test for independence between the classes of variables. It is based on a comparison between the frequencies that are observed in a cell of a cross-classification table and those that are expected. The chi-square value measures the significance of association. The tests were performed at five percent level.

RESULTS AND DISCUSSION

Table 1 summarizes the characteristics of non-participants in the Macon County FSP. The average age of the respondents was 28. Thirteen percent were under 20 years old, 71 percent were between 21 and 40 years, five percent were between 41 and 60 years, and seven percent were between 61 and 88 years. Sixty-four percent of the respondents were females, and 34 percent of the respondents were males. The average household size was three. Forty-six percent of the households size were between one and two, 44 percent were between three and four, ten percent were between five and six individuals. Forty-one percent of the respondents had children and 59 percent of the respondents did not have children. The average number of children per household was one. Seventy-two percent of the respondents were single and have never been married, seven percent of the non-participants were divorced, five percent were married, five percent were not married, but living with someone, five percent were widowed, and two percent were separated.

Over 85 percent were within the able-bodied age range, of 18 to 50. Almost two-thirds of the non-participants were females. Over two-thirds of the non-participants were single and have been married. In general the characteristics were similar to the findings by Coe (1983) in the marital status, females being the largest group, and respondents without children in the household.

Table 1
Frequency and Percentage Reflecting the Characteristics of Non-participants

Variable	Responses	
	Frequency	% (Average)
Age		
Under 20 years	8	13
21 - 40	43	71
41 - 60	6	5
61 - 88	4	7
Average age		(28)
Sex		
Female	39	64
Male	21	34
Refused	1	2
Household Size		
1 - 2	28	46
3 - 4	27	44
5 - 6	6	10
Average household size		(3)
Children		
Respondents with children	25	41
Respondents without children	36	59
Average no. children per household		(1)
Marital status		
Single never married	44	72
Divorced	4	7
Married	3	5
Not Married living with someone	3	5
Widowed	3	5
Separated	1	2
Refused	3	5

Table 2 displays the educational levels of the respondents. Three percent had eighth grade or less education, 20 percent of the respondents had some high school education, 51 percent of the respondents had a high school diploma/GED education, three percent had some college or technical school education, five percent had an associate degree education, 15 percent had a bachelors degree education, and two percent had a graduate/professional degree education. Overall, seventy-four percent had a high school diploma/GED or less, while 25 percent has had some type of post secondary education. This population was a little more educated due to the presence of college students among the survey respondents. In general the respondents' educational levels are similar to the results by Coe (1983).

Table 2
Respondents Educational Levels

Variable	Responses	
	Frequency	%
Eighth grade or less	2	3
Some high school	12	20
High school diploma/ GED	31	51
Some college or technical school	2	3
Associate degree	3	5
Bachelor's degree	9	15
Graduate/Professional degree	1	2
Refused	1	2

Table 3 represents the nature of non-participation and further characteristics in terms of being a Tuskegee University student or not. Fifty-one percent were intentional and 38 percent were non-intentional. Fifty-six percent of the non-participants were Tuskegee University off-campus students and 44 were low-income residents of Macon County. The

presence of many university students will have to be taken into account when interpreting the results, but in general widespread in proportions of intentional and non-intentional non-participants were not similar to the findings by any of the reviewed studies.

Table 3
Status of Non-participants

Variable	Responses	
	Frequency	%
Type of non-participant		
Intentional non-participant	31	51
Non-intentional non-participant	23	38
Refused	7	11
Tuskegee University off campus student	34	56
Non-student	27	44

Table 4 presents how respondents were raised. Sixty-four percent indicated they lived with both parents while growing up, 29 percent of the respondents were raised by single parent families, with the mother as the primary parent in most cases. Three percent lived in foster care, two percent lived with their grandmother, and two percent refused to respond.

Table 4
Living Arrangements of Respondents While Growing Up

Variable	Responses	
	Frequency	%
Both parents	39	64
Mother	17	29
Foster care	2	3
Grandmother	1	2
Refused	1	2

Table 5 displays the mothers' educational background, 15 percent had a eighth grade or less education, 13 percent had some high school education, 38 percent had high school diploma/GED education, ten percent had some college or technical school education, three percent had an associate degree education, ten percent had a bachelors degree education, three percent had a graduate/professional degree education, three percent reported other, and five percent refused respond.

Table 5
Mother's Educational Background

Variable	Frequency	Responses %
Eighth grade or less	9	15
Some high school	8	13
High school diploma/GED	23	38
Some college or technical school	6	10
Associate's degree	2	3
Bachelor's degree	6	10
Graduate/Professional degree	2	3
Other	2	3
Refused	3	5

Table 6 represents the fathers' educational background, 11 percent had eighth grade or less education, eight percent had some high school education, 43 percent had high school diploma/GED education, five percent had some college or technical school education, two percent had an associate degree, seven percent had a bachelors degree education, eight percent had a graduate/professional degree education, 13 percent had other and three percent refused respond.

Table 6
Father's Educational Background

Variable	Responses	
	Frequency	%
Eighth grade or less	7	11
Some high school	5	8
High school diploma/GED	26	43
Some college or technical school	3	5
Associate's degree	1	2
Bachelor's degree	4	7
Graduate/professional degree	5	8
Other	8	13
Refused	2	3

Table 7 on the family background and perceptions shows that 66 percent of the respondents' parents were employed while the respondent was a child. While growing up, two percent thought their family income was excellent, 30 percent of the respondents thought their family income was good, 52 percent of the respondents thought their family income was fair, eight percent of the respondents thought their family income was poor, and three percent did not know of their family income. Fifty-one percent of the respondents remember their families using some sort of government assistance, 38 percent of the respondents' families did not use any government assistance, and 11 percent did not know if their family used any assistance or not.

Over two-thirds of the respondents had both parents who were employed while the respondent was growing up. This shows that there was not a significant pattern of unemployment. Thirty-two percent of the respondents' perception of their family income was between excellent and good; but for 60 percent of the respondents, the perception was between fair and good. Almost two-thirds of the respondents' families used some type of

government assistance, while growing up. Findings from Coe (1983) and Ohls et al. (1985) were similar in terms of families using some type of government assistance.

Table 7
Perceptions on Family Background

Variable	Responses	
	Frequency	%
Parent employment status		
Mother was employed	40	66
Father was employed	40	66
Respondent impression of family income		
Excellent	1	2
Good	18	30
Fair	32	52
Poor	5	8
Did not know	2	3
Refused	3	5
Family use of any government assistance		
Yes	31	51
No	23	38
Did not know	7	11

Table 8 displays reasons for and barriers to participation into the intentional non-participants. Seven percent believed they were probably not eligible for food stamp benefits, 13 percent cited lack of employment opportunities in the Macon County area, six percent said there was too much paperwork, four percent did not know how or where to apply, another six percent felt the application was too personal, four percent of the non-participants did not know why they did not participate in the FSP, six percent never got around to applying, three percent cited someone told them not to bother, one percent did not like to rely

on government/ charity, and one percent stated they had a previous bad experience with the FSP.

Table 8 also displays the views of non-intentional non-participants. Sixteen percent believed they probably were not eligible for food stamp benefits, three percent cited lack of employment opportunities in Macon County area, four percent cited too much paperwork, six percent did not know how or where to apply, three percent felt the application was too personal, four percent of the non-participants did not know why they did not participate in the FSP, one percent never got around to applying, three percent cited someone told them not to bother, another three percent did not like to rely on government/ charity, one percent believed in self-reliance and self-help, and another one percent stated the benefits were too small for efforts required.

Information on the total sample is also shown in Table 8. Twenty-three percent believed they probably were not eligible for food stamp benefits, 16 percent mentioned the lack of employment opportunities in the area, ten percent did not have any real reason, another ten percent did not know how or where to apply, nine percent felt the application was too personal, ten percent claimed too much paper work, seven percent never got around to applying, six percent indicated someone told them not to bother, one percent did not like to rely on government/ charity, three percent believed in self reliance and self-help, one percent cited the benefits were too small for efforts required, and three percent cited a previous bad experience with the FSP.

Table 8
Reasons For and Barriers to Participation

Variable	Responses				Total	
	Intentional		Non-intentional		Frequency	%
	Frequency	%	Frequency	%	Frequency	%
Probably Not Eligible	5	7	11	16	16	23
Lack of jobs	9	13	2	3	11	16
Do not know why	4	6	3	4	7	10
Do not know how or where to apply	3	4	4	6	7	10
Application too personal	4	6	2	3	6	9
Too much paperwork	3	4	3	4	7	10
Never got around to applying	4	6	1	1	5	7
Someone told me not to bother	2	3	2	3	4	6
Do not like to rely on government/charity	1	1	0	0	1	1
Believe in self-reliance and self help	0	0	2	3	2	3
Benefits too small for efforts required	0	0	1	1	1	1
Previous bad experience with FSP	1	1	1	1	2	3

Chi-square = 13.268 df = 11 P < 0.516

Hypothesis 1 about the statistical independence of the reasons for and barriers to participation and the non-participants' status was accepted. It means the two are not dependent upon each other. The computed chi-square was 13.268. The reasons for and barriers to participation for the two groups were statistically independent. Overall from Table 5, major reasons for the intentional and non-intentional non-participants are the lack of jobs and the probability of being not eligible. These findings were similar to those by Blanchard et al. (1982), Coe (1983), Ohls (1985), GAO (1988), and Bartlett et al. (1992).

Table 9 exhibits opinions on using cash instead of food stamps for intentional non-participants. Thirty-six percent of the respondents said they would apply for food stamps, 18 percent of the respondents would not apply, and three percent said they did not know if they would apply for food stamps if they received cash instead of coupons. Table 9 also illustrates perceptions for non-intentional non-participants. Thirty-one percent of the respondents said they would apply, nine percent of the respondents would not apply, and two percent said they did not know if they would apply for food stamps if they received cash instead of coupons. For all respondents combined (Table 9), 67 percent said they would apply, 27 percent of the respondents would not apply, and seven percent said they did not know if they would apply for food stamps if they received cash instead of coupons.

Hypothesis 2 about the statistical independence of the responses on preference of cash instead of food stamps and the respondents status was accepted. The computed chi-square was 0.729. In other words, the two groups are not related. Two-thirds of the respondents would prefer cash instead of food stamps. This result was most likely associated with the

stigma of using food stamps. It was expected that the respondents would prefer cash instead of food stamps.

Table 9
Respondents Opinion of Cash Instead of Food Stamps

Variable	Intentional		Non-intentional		Total	
	Frequency	%	Frequency	%	Frequency	%
Yes	16	36	14	31	30	67
No	8	18	4	9	12	27
Do not know	2	4	1	2	3	7

Chi-square = 0.729 df = 2 P < 0.700

Table 10 shows respondents' opinions of EBT (Electronic Benefits Transfer) card instead of food stamps. Seventy percent would apply, eight percent would not apply, and 15 percent did not know if they would apply for food stamps if benefits were credited to a EBT card. Over two-thirds of the respondents would prefer EBT instead of food stamps. This also shows the stigma that food stamp has on individuals. It was also expected that the majority of the respondents would prefer EBT instead of food stamps.

Table 10
Respondents Opinion of EBT Instead of Food Stamps

Variable	Responses	
	Frequency	%
Yes	43	70
No	5	8
Refused	4	7
Do not know	9	15

Table 11 shows whether or not respondents have received any emergency food from church, food pantry, soup kitchen, or food bank. Fifteen percent of the respondents said yes; 79 percent, no; and two percent did not know. It was expected that the majority of the non-participants would use more emergencies, but that was not true in this situation. These results are due the fact that the respondents are self-reliant and self-sufficient. There seemed to be a special sense of pride in these respondents.

Table 11
Emergency Food Assistance for Respondents

Variable	Frequency	Responses %
Yes	9	15
No	48	79
Refused	3	5
Do not know	1	2

Table 12 displays the results on the use of any food vouchers. Five percent of the respondents said yes, 85 percent said no, and three percent did not know. Obviously, very few of the respondents received food vouchers, showing that most non-participants did not depend on any outside help for assistance. These results were also confirmed by the strong sense of self-reliance among these non-participants. Vouchers were indeed also related to the stigma of outsiders knowing these respondents were actual in need.

Table 12
Food Vouchers for Respondents

Variable	Responses	
	Frequency	%
Yes	3	5
No	52	85
Refused	4	7
Do not know	2	3

Table 13 illustrates whether or not respondents have experienced any hunger. Thirty percent of the respondents said yes, 63 percent said no, and five percent did not know. Almost one-third of the respondents experiencing some type hunger. This is a higher number than expected, given that only a minimal amount of respondents have received food assistance, food vouchers, emergency food assistance, financial assistance, or general assistance.

Table 13
Respondents Experiencing any Hunger

Variable	Responses	
	Frequency	%
Yes	18	30
No	40	63
Refused	1	2
Do not know	3	5

Table 14 shows why the respondents have experienced hunger. Fifty-nine percent of the respondents stated not having enough money for food, seven percent stated it was too hard to get to the store, two percent do not have a working stove, two percent did not have

time to go to the store, and 15 percent did not know. The fact that almost two-thirds of the respondents stated that they have experienced hunger because they did not have enough money for food suggests that the need for food stamps was still real for this group of respondents.

Table 14
Why Respondents Experiencing Any Hunger

Variable	Responses	
	Frequency	%
Not enough money for food	27	59
Too hard to get to the store	3	7
Do not have a working stove	1	2
Did not have time to go to the store	1	2
Other	1	2
Refused	6	13
Do not know	7	15

Table 15 illustrates what intentional non-participants would do if they received food stamp benefits. Two percent would change and, 54 percent of the respondents would not change their shopping places to prevent people from knowing that they used food stamps. Three percent did not know if they would change their shopping places. Table 15 also exhibits what non-intentional non-participants would do if they received food stamp benefits. Thirty-eight percent of the respondents would not change, and two percent do not know if they would change their shopping places. In terms of the whole sample, two percent would change, and 92 percent of the respondents would not change their shopping places to prevent people from knowing that they used food stamps. Six percent did not know if they would change their shopping places.

Table 15
Respondents Changing Their Shopping Places

Variable	Intentional		Non-intentional		Total	
	Frequency	%	Frequency	%	Frequency	%
Yes	1	2	0	0	1	2
No	28	54	20	38	48	92
Do not know	2	3	1	2	3	6
	Chi-square = 0.772	df = 2	P < 0.686			

Still related to Table 15, hypothesis 3 about the statistical independence of the responses to changing their shopping places and the respondents status was accepted. The computed chi-square was 0.772. Responses from intentional and non-intentional non-participants were not related. The fact that over 90 percent of the respondents would not change their shopping places if they received food stamps was not expected given the sensitivity that most respondents seem to have with respect to using food stamps in public.

Table 16 displays results on whether or not respondents would be for changing their shopping behaviors should they receive food stamps. Ninety percent of the respondents would not change, and five percent did not know if they would change their shopping behavior to prevent people from knowing that they used food stamps. Shopping behaviors refer to respondents going out of their way to do things differently, so that people would not find out about new practices. These results were unexpected. The expectation was that the association with food stamps would have played a larger role. Therefore, it was expected that the respondents would change their shopping behavior.

Table 16
Respondents Changing Their Shopping Behavior

Variable	Responses	
	Frequency	%
Yes	0	0
No	55	90
Refused	3	5
Do not know	3	5

Table 17 exhibits results about the need for general assistance. Forty-three percent of intentional non-participants depended on themselves; whereas seven percent depended on friends; four percent on family; two percent on Tuskegee University; and another two percent on co-workers. Shown also in Table 17 were the general assistance needs for the non-intentional non-participants. Thirty-seven percent depended on themselves; four percent on friends; and two percent on family. Under general assistance needs (Table 17) are shown the strategies respondents use in lieu of food stamps. Eighty percent of the non-participants depended on themselves; 11 percent on friends; six percent on family; two percent on co-workers; and another two percent on Tuskegee University.

Hypothesis 4 about the statistical independence of the responses to general assistance and the respondents status was accepted. The computed chi-square was 2.070 and the degree of freedom is four. The two groups of non-participants are not related in terms of responses on general assistance needs.

Table 17

**Strategies Used by Non-participants to Sustain Themselves
in the Absence of Food Stamp for General Assistance**

Variable	Responses				Total	
	Intentional		Non-intentional		Frequency	%
	Frequency	%	Frequency	%	Frequency	%
No one	23	43	20	37	43	80
Friends	4	7	2	4	6	11
Family	2	4	1	2	3	6
Co-Workers	1	2	0	0	1	2
Tuskegee University	1	2	0	0	1	2

Chi-square = 2.070 df = 4 P < 0.726

Table 18 shows what the intentional non-participants use in lieu of food stamps strategies for financial assistance. Thirty-seven percent depended on themselves, but 11 percent depended on family, seven percent on friends, and two percent on co-worker. As for non-intentional non-participants, 30 percent depended on themselves, nine percent on friends, and four percent on family.

Table 18 also presents the financial assistance and strategies respondents use in lieu of food stamps. Sixty-seven percent of the non-participants depended on themselves; whereas 20 percent depended on friends; 11 percent on family; and two percent on co-workers. In addition, hypothesis 5 about the statistical independence of the responses to financial assistance and the respondents status was accepted. The computed chi-square was 1.040 and the degree of freedom is three. Responses from the intentional and non-intentional non-participants were not related.

Table 18

**Strategies Used by Non-participants to Sustain Themselves
in the Absence of Food Stamp for Financial Assistance**

Variable	Responses				Total Frequency	Total %
	Intentional		Non-intentional			
	Frequency	%	Frequency	%		
No one	20	37	16	30	36	67
Friends	6	11	5	9	11	20
Family	4	7	2	4	6	11
Co-Workers	1	2	0	0	1	2

Chi-square = 1.040 df = 3 P < 0.794

Table 19 displays food assistance strategies used by non-participants to sustain themselves in the absence of food stamps. Very few of the respondents have grown fruits, vegetables, raised livestock, or hunted game to provide their households with food. Three percent grew vegetables and two percent raised animals. The numbers are very small, thus making them difficult to interpret.

Table 19

**Strategies Used by Non-participants to Sustain Themselves
in the Absence of Food Stamp for Food Assistance**

Variable	Responses	
	Frequency	%
Raised Animals	1	2
Grew Vegetables	2	3

The data in Table 20 show the employment status for intentional non-participants. Ten percent are working full-time, 12 percent are working part-time, two percent are self-employed, 19 percent are unemployed and seeking work, and ten percent are unemployed,

but not seeking work. With respect to the non-intentional non-participant, five percent were working full-time, five percent were working part-time, two percent were self-employed, 24 percent were unemployed and seeking work, and 12 percent were unemployed, but not seeking work.

In terms of the total sample, 14 percent of the respondents were working full-time, 19 percent were working part-time, five percent were self-employed, 43 percent were unemployed and seeking work, and 21 percent were unemployed, but not seeking work. Overall thus, 38 percent of the respondents are employed. Sixty-four percent are not employed. In looking at the respondents' employment status, the largest group is not employed, but seeking work. This means that there is a desire for employment, but because of lack of jobs, being in school full-time or part-time, the lack of transportation, and the lack of childcare, these individuals are not working. The high unemployment levels in Macon County are similar to other BBCs, high unemployment rates and consequences on job searches tend to be the same.

Hypothesis 6 about the statistical independence of the respondents' employment and the respondents status was accepted. The computed chi-square was 1.478. Responses from intentional and non-intentional non-participants groups were not related.

Table 20
Respondents Employment Status

Variable	Intentional		Non-intentional		Responses		Total
	Frequency	%	Frequency	%	Frequency	%	
Full-time	4	10	2	5	6	14	
Part-time	5	12	3	7	8	19	
Self-employed	1	2	1	2	2	5	
Unemployed (seeking work)	8	19	10	24	18	43	
Unemployed (not seeking work)	4	10	5	12	9	21	

Chi-square = 1.478 df = 4 P < 0.833

Table 21 represents the status of employment training of the respondents. Sixteen percent have received some employment training, and 85 percent have not received any employment training. The latter percentage is critical due to the fact that an individual has to be in some type of employment training to receive food stamps. Without any employment training, it would be difficult for individuals to receive food stamps if they were interested in participating in the program.

Table 21
Respondents Employment Training

Variable	Responses	
	Frequency	%
Yes	6	16
No	52	85
Refused	2	3
Do not know	1	2

Table 22 shows the impression about Macon County by the intentional non-participants. Forty-three percent thought there are too few "good jobs" in the Macon County area, six percent thought there are too few "jobs" in the Macon County area, and eight percent cited enough good jobs but only a few available to blacks. As for the non-intentional group, 38 percent thought there are too few "good jobs" in the Macon County area, two percent thought there are too few "jobs" in the Macon County area, and another two percent thought there are enough "good jobs", but only a few available for blacks. For the total sample 81 percent thought there are too few "good jobs" in the Macon County area,

six percent thought there are too few "jobs" in the Macon County area, and nine percent cited enough "good jobs" but only a few available to blacks.

Impressions about the economy were also presented in Table 22 for the intentional non-participants. Twenty-eight percent said it was getting worse, 22 percent said it was the same, and two percent did not know. For the non-intentional group, 19 percent said it was getting worse, 22 percent said it was remained same, four percent was getting better and two percent said they did not know. On the issue of the county's economy in the past, 50 percent said it has gotten worse, 41 percent said it has remained the same, four percent said it was getting better, and four percent said they did not know.

As shown also in Table 22 for the total sample with respect to how respondents view the future over the next five to ten years, seven percent responded excellent, 16 percent responded good, 13 percent fair, nine percent poor, and seven percent did not know. Over the next five to ten years, the non-intentional non-participants saw their future as excellent, seven percent, good 13 percent, fair seven percent, poor seven percent, will not be in this area in five to ten years six percent, and two percent did not know. Fifteen percent of the respondents believed the economy in Macon County will be excellent over the next five to ten years, 24 percent believed it will be good, 22 percent believed it will be fair, 17 percent believed it will be poor, nine percent will not be in this area in five to ten years, and nine percent did not know.

Perceptions about employment opportunities in Macon County were generally unfavorable as shown in Table 22. Half of the respondents believe the county's economy is getting worse, and only four percent believe it is getting better. As for the county's economy

in five to ten years, 39 percent reported a positive outlook, and 39 percent said it would be negative. Nine percent declared they would not be in the area in five to ten years.

Table 22
Respondents Impression of Macon County

Variable	Responses					
	Intentional		Non-intentional		Total	%
	Frequency	%	Frequency	%	Frequency	%
Employment Sector Macon County						
Too few good jobs	23	43	20	38	43	81
Too few jobs	2	3	1	2	3	6
Enough good job but only a few available for blacks	4	8	1	2	5	9
Refused	2	4	0	0	2	4
Economy in Macon County						
Getting worse	15	28	12	22	27	50
Remained same	12	22	10	19	22	41
Getting better	0	0	2	4	2	4
Refused	1	2	0	0	1	2
Do not Know	1	2	1	2	2	4
Economy in Macon county in 5 to 10 Years						
Excellent	4	7	4	7	8	15
Good	6	16	7	13	13	24
Fair	8	13	4	7	12	22
Poor	5	9	4	7	9	17
Will not be in this area in 5 to 10 years	2	4	3	6	5	9
Refused	2	4	0	0	2	4
Do not Know	4	7	1	2	5	9

SUMMARY AND CONCLUSION

The purpose of this study was to provide empirical evidence in terms of the socio-economic characteristics and strategies of eligible non-participants in the FSP in Macon County, Alabama. The objectives of the study were (1) to identify the characteristics of low income eligible non-participants in the FSP, (2) to determine reasons for and barriers to participation for intentional as well as non-intentional non-participants, and (3) to assess and evaluate the strategies used by intentional and non-intentional non-participants to sustain themselves in the absence of food stamps. Frequency distribution and chi-square statistics were used to analyze the survey data.

The respondents were all African American. The age range was from 16 to 88. Eighty-five percent of the total respondents were of the able-bodied age range. The average was 28. Almost two-thirds of the respondents were female, while only one-third were male. The household size range was from one to six. The average household size was three. Forty-one percent of the respondents had children. Almost 75 percent of the respondents were single and had never been married.

For the non-intentional non-participant, the key reason for the lack of participation was the fact that they believed they were ineligible for food stamps. The main reason for the lack of participation in the FSP by the intentional non-participant was related to the scarcity of jobs in the Macon County area. The strategies used by intentional non-participants to sustain themselves in the absence of food stamps was self-reliance. A few individuals in this group received help from family or friends. The strategies used by non-intentional non-

participants to sustain themselves in the absence of food stamps was also self-reliance and only a few individuals received help from family or friends.

In terms of family history, the respondents, in a little over half the cases, have been exposed to some type of government assistance. While none of the respondents participated in the FSP, very few received any other kind of governmental assistance. The vast majority stated that they would apply for food stamps if changes in the program were made, but would not change their shopping habits or location. In looking at the respondents' employment status, most were not employed, but seeking work. Perceptions of the economic environment can be summarized as follows: half of the respondents believe the county's economy is getting worse, close to 40 percent believed it will still be bad in five to ten years.

In major part, welfare reform was predicted to move welfare recipients from the welfare programs to the labor market; however, this market, to which most welfare recipients will have to turn, is not looked at as a viable source of financial and food assistance support in the rural Black Belt. It is indeed characterized by high unemployment and steadily falling wages, even though the overall labor market is relatively tight cited by Bernstein in 1997. With such weak and relatively negative perceptions of the local economy in which traditional FSP non-participants develop their own means for food assistance, welfare reform will less likely help poor families. Poor households in rural areas such as Macon County might not fight hard to remain eligible for food stamps and will either develop their own self reliance strategies or suffer hunger. Welfare reform will thus run the risk of disregarding the important role of the federal government in social responsibility.

The welfare reform is supposed to bring people who are employable out of poverty by helping them get and keep jobs, while maintaining a basic level of assistance for those who are not employable. This was to help reduce the federal budget deficit. Reducing the deficit is a plausible goal, but not at the expense of poor households and children. The danger is one of destroying the federal commitment that places a floor under every income, regardless of where a person lives or in what type of household.

Findings of this study also suggest challenges in equity and access issues in the FSP. Equity deals with the proper allocation of resources. Now the federal government allocates the funding for food stamps to the individual states and the states allocate the funding to the individual counties. Historically this devolution process has had a negative impact on poor and minority populations in the south. In looking at access, eligible non-participants might not have access to the FSP due to informational and transportation problems.

Basic changes in how the FSP is managed could increase participation for those who are eligible. While the survey found that most of the respondents relied mostly on themselves in times of food or financial need, a significant portion received food from a church, food pantry, soup kitchen, or food bank. Almost one-third of the respondents have experienced hunger. These are the alternative strategies that ought to be developed in rural areas. Finally, this study identified a previously overlooked eligible population-students. Often independent from their families, with pressure to do school work, with little time for employment, living in an area with few job opportunities, and coupled with drastic cuts in school loan programs, students present another set of challenges to the changing welfare system in general and the FSP specifically.

In terms of the limitations of the study, the snowball sampling technique is not as reliable as other sampling techniques, it still provides critical and insightful information given the difficulties of reaching non-participants in general. It represents a first attempt to accumulate information of this nature concerning the status of African-American non-participation in the FSP.

BIBLIOGRAPHY

- Alabama State Department of Human Resources. 1998. Welfare Reform is Working. The First Year Report on the Success of Welfare Reform in Alabama. Montgomery, AL.
- Allen, E. and C. G. Davis. 1989. Domestic Food Programs: Issues and Alternatives In Agricultural and Food Policy: Issues and Alternatives for the 1990's. R. G. Spitze, Ed. University of Illinois at Urbana-Campaign, Urbana, IL.
- Allin, S. and H. Beebout. Determinants of Participation in the Food Stamp Program: A Review of Literature. Mathematical Policy Research, Inc. Washington, D. C.
- Andrews, M. S. and K. L. Clancy. 1985. The Political Economy of the Food Stamp Program. Discussion Paper Series No. RR85-08, National Center for Food and Agricultural Policy, Resources for the Future. Washington, D.C.
- AUM (Auburn University at Montgomery). 1995. Alabama Population Data Sheet. The Center of Demographic and Cultural Research. Montgomery, AL.
- Bailey, K. 1982. Methods of Social Research. 2nd Edition. New York: The Free Press.
- Beebout, H., and J.C. Ohls. 1993. The Food Stamp Program: Design Tradeoffs, Policy, and Impacts, pp. 11-28. The Urban Institute Press; Washington, D. C.
- Beaulieu, Bo. 1997. An overview of Major Provisions Associated with Welfare Reform. Southern Perspectives. Southern Rural Development Center. Vol.1. No.1.
- Blanchard, L., et al. 1982. Food Stamp SSI/Elderly Cash-out Demonstration Evaluation. Princeton, NJ: Mathematical Policy Research, Inc.
- Blank, R. M. and P. Ruggles. 1996. When do Women Use Aid to Families with Dependent Children and Food Stamps? The Dynamic of Eligibility Versus Participation. Journal of Human Resources. Vol. 31. No. 1. pp. 57-90.
- Blaylock, J.R., and D. M. Smallwood. 1988. Reasons for Non-participation in Food Stamp Program. Western Journal of Agricultural Economics, Vol. 9 No. 1, pp.117-122.
- Boehm, W. T., P. E. Nelson and K. A. Longen. 1980. Progress Toward Eliminating Hunger in America. USDA, Agricultural Economics Report No. 446.
- Butler, J. S. and J. C. Raymond. 1996. The Effects of the Food Stamp Program on nutrient intake. Economic Inquiry. Vol. 38. No. 8. pp. 781-789.

- Cason, Mike. 1977. "Food Stamp Rule Affects 15,000 in the State." Montgomery Advertiser. 25 February. Sec. 5A. p.
- _____. 1997 "Food Aid Request Too Late For Some." Montgomery Advertiser. 18 March. Sec. 1A. p. 1 and 7.
- Castle, E.N. 1993. Persistent Poverty in Rural America: Rural Sociological Task Force on President Rural Poverty. Boulder, Colorado: Westview Press.
- Center on Budget and Policy Priorities. 1995. The Conference Agreement on the Welfare Bill. Washington, D. C.
- Center on Budget and Policy Priorities. 1996. The Depth of the Food Stamp Cuts in the Welfare Bills. Washington, D. C.
- Coe, R.B. 1983. Non-participation In Welfare Programs By Eligible Households: The Case of the Food Stamp Program. Journal of Economics. Issues 10: 1031-1091.
- _____. Participation in the Food Stamp Program, 1979. In Five Thousand American Families -- Patterns of Economics Progress; Vol. 10. G. J. Duncan and J. N. Morgan, Ed. Ann Arbor Institute for Social Research, University of Michigan, 1963b.
- Devaney B. and R. Moffitt. 1991. Dietary Effects of the Food Stamp Program. American Agricultural Economic Association. Kansas State University. Manhattan, Kansas. Vol. 73 No. 1. 202-211.
- Edelman, Peter. 1997. "The Worst Thing Bill Clinton Has Done." Atlanta Constitution. March
- Efforts To Reform Welfare Place Nutrition Programs At Risk. 1995. Journal of the American Dietetic Association. February. V95. No. 2. p.160 (2).
- Falk, W. and T. Lyson. 1988. High Tech, Low Tech: Recent Industrial and Occupational Change in the South. Albany, NY: State University of New York Press.
- FCS (Food and Consumer Service). 1995. The Food Stamp Program. U. S. Department of Agriculture. Washington, D. C.
- FCS and ERS (Food and Consumer Service) and (Economic Research Service). 1995. U. S. Department of Agriculture USDA Analysis of Section 1120. Food Research and Action Center. Washington, D. C.
- FRAC (Food Research and Action Center). 1997. Federal Response to Hunger. Hunger in the United States.

- _____. 1997. Summary of Nutrition Provision in the Welfare Reform Act. Hunger in the United States. 1997.
- _____. 1996. Federal Nutrition Block Grant Update. Washington, D. C.
- Guthrie, H. A. 1986. Introductory Nutrition. St. Louis: Times Mirror/Mosby College Publishing.
- Heiser, N. and S. Smolkin. 1995. Characteristics of the Food Stamp Program House Holds. Alexandria, VA: Office of Analysis and Evaluation, Food and Nutrition Service, Department of Agriculture.
- Hill, R., A. Billingsley, E. Engram, M. Malson, R. Rubin, C. Stack, J. Stewart, J. Teele. 1994. Research on the African American Family. Westport, CT: Auburn House.
- Hollingworth, S. 1993. Demographic Changes in the Black Belt of Alabama: 1880-1990. In Focus on Black Belt Counties: Life Conditions and Opportunities. N. Baharanyi, R. Zabawa, W. Hill, and R. Wimberley, Eds. Southern Rural Development Center Publication Number 172.
- Isserman, A. 1975. An Economic Analysis. Social Services Review; Vol. 89. No. 8: 100-207.
- Kotz, N. 1979. Hunger in America: The Federal Response. New York: Field Foundation.
- Jensen, L. and D. J. Eggebeen. 1994. Non-metropolitan Poor Children and Reliance on Public Assistance. Rural Sociology. Vol. 18. No. 1: 81-21.
- Jussaume Jr., R. A. and D. H. Judson. 1992. Food Safety and Consumption: Public Perception about Food Safety in the United States in the United States and Japan. Rural Sociology. Vol. 57. No. 2 : 235-289.
- Kuhn, D. A., P. A. Dunn, D. Smallwood, K. Hanson, J. Blaylock, S. Vogal. 1996. Policy watch: the Food Stamp Program and Welfare Reform. Journal of Economic Perspectives. Vol. 10. No. 2: 189-199.
- Lane, S. 1995. The United States Food Policy. American Journal of Agricultural Economics. Vol. 77, No. 1: 1092-1110.
- Levedahl, J.W. 1995. How Much Can Informational Outreach Programs Increase Food Stamp Program Participation? American Journal of Agricultural Economics. Vol. 77, Number 2: 389-813.

- Lutterback, Deborah. 1995. Food Stamp Fallout. Common Cause. Spring. V. 21. No.1: 8 (4).
- Lyson, T. 1989. Two Sided to the Sunbelt: The Growing Divergence Between the Rural and Urban South. New York: Praeger.
- Montgomery Advertiser. 1997. "Nearly 100,000 Become Ineligible For Food Stamps." Sec. 1A. p.1.
- O'Hare, W. 1989. The Rise of Poverty in Rural America. Population Bulletin No. 55. Population Reference Bureau. Washington, D. C.
- O'Hare, W. 1988. Poverty in America: Trends and New Patterns. Population Bulletin No. 55. Population Reference Bureau. Washington, D. C.
- Ohls et al. Food Stamp Program Simplified Application Demonstration Evaluation. Princeton, NJ: Mathematica Policy Research, Inc. 1985.
- Oliveira, Victor. 1995. Participation in FSP Dropped in 1995. Food Review. December. Vol.10. no. 3. p.33-36.
- Senauer, B. 1993. America's Second Currency. The Region Magazine.
- Senauer, B. and N. Young. 1986. Impact of Food Stamps on Food Expenditures. Rejection of the Traditional Model. American Journal of Agricultural Economics. Vol. 63. No. 1. p. 37-83.
- SENSES. 1996. Learning from the Expert: Consumers' Perceptions of the Food Stamp Program. Food Research and Action Center. Washington, D. C.
- Sherraden, M. 1995. Four Short Stories About A Vision. The 1985 Farm Bill: Issues and Implications for Rural Communities. N. Baharanyi, R. Zabawa, and W. Hill, Eds. Tuskegee University, AL.
- Super, David. 1997. Who Will Lose Food Stamps Under the Three - Month Cut-Off?
- Trippe, C., P. Doyle, and A. Asher. 1992. Trends in Food Stamp Program Participation Rates: 1976-1990. Washington, D. C. Mathematica Policy Research, Inc.
- U.S. Food System. 1996. New Welfare Laws Reduces Food Stamp Benefits. (Personal Responsibility and Work Opportunity Act of 1996.) Food Review. Vol. 59. No. 3: 32-38.

- U.S. General Accounting Office. 1988. Food Stamps: Examination of Program Data and Analysis of Non-participation: Current Population Reports, series P-60. No. 155. Washington, D. C.: Government Printing Office.
- U.S. Senate Advisory Committee. 1993. Time for a change: Remaking the Welfare System. Report of the Welfare Simplification and Coordination Advisory Committee.
- Weinberg, D. H. 1987. "Rural Pocket of Poverty." Rural Sociology, Vol. 12 No. 3: 398-808.
- Weinberg, D. H. 1985. "Filling the Poverty Gap: Multiple Transfer Program Participation." Journal of Human Resources. Vol. 20. No.1: 68-89.
- Wimberley, R., L. Morris and D. Bachtel. 1992. New Developments in the Black Belt: Dependency and Life Conditions. In New Directions in Local and Rural Development. N. Baharanyi, R. Zabawa and W. Hill, Eds. Tuskegee University, AL.
- Wimberley, R., L. Morris and D. Bachtel. 1994. The Southern Rural Black Belt and Policy Initiatives. In New Directions in Local and Rural Development. N. Baharanyi, R. Zabawa and W. Hill, Eds. Tuskegee University, AL.
- Wimberley, R. C. and L. V. Morris. 1994. Welfare Reform for the South? In The 1993 Farm Bill: Issues and Implications for Rural Communities. N. Baharanyi, R. Zabawa, and W. Hill, Eds. Tuskegee University, AL.

APPENDICES

APPENDIX A

FSP ELIGIBILITY REQUIREMENTS

Requirements

To be eligible for food stamps, applicants must meet income guidelines, asset limitations, and certain work requirements. The monthly benefits are based on income and household size. The dollar amount is adjusted each year to reflect changes in the Thrifty Food Plan. The Thrifty Food Plan amounts determine the reduction, suspension or cancellation of the certification for eligible food stamp households.

Households applying for or receiving food stamp benefits must meet all applicable eligibility requirements and must cooperate with the appropriate agency to establish eligibility for food stamp assistance. Failure to meet the requirements can result in a denial or termination of the food stamp case. The technical requirements are as follows:

1. ***Household members*** - The food stamp household is composed of individuals who live together and purchase and prepare their meals together for their home consumption. Certain individuals such as spouses and children under the age of 22 must be included in one food stamp household regardless of their method of buying food and preparing meals.
2. ***Strikers*** - Households with striking members are ineligible to participate in the FSP, unless the household was eligible for benefits the day before the strike and is otherwise eligible at the time of the application.

3. ***Citizenship and Alien Status*** - Only United States citizens and eligible aliens may participate in the FSP.
4. ***Social Security Numbers*** - The household must furnish a Social Security Number for each household member. If a household member does not have a number, he/she must apply for one. The Social Security Number is used in computer matching and program reviews or audits to make sure the household is eligible for the food stamp benefits it receives.
5. ***Residence*** - The household must apply for food stamps in the county in which they live.
6. ***Work Requirements*** - Unless otherwise exempt, each household member must be registered for work. Failure to cooperate with the work requirements may result in the entire household being disqualified from participation in the FSP. Unless exempt, certain food stamp recipients (between the ages of 18 - 50 who are able bodied and have no dependents) are eligible to receive food stamps only 3 months in a 36-month period if he/she is not working or participating in a work and training program for at least 20 hours a week. Individuals are exempt from this provision during the time they are medically certified as physically or mentally unfit for employment, or pregnant; participating and complying with work registration requirements of JOB or UCB caring for an incapacitated person, a student at least half-time in a recognized school, training program, or institution of higher education, participating in an alcohol/drug treatment program.

INCOME ELIGIBILITY

7. **Income** - Income limits vary according to the household size. Households that contain no elderly or disabled individuals must meet both the gross (income before deduction) and the net income (income after allowable deductions) limits. Households that contain an elderly (age 60 or over) individual or a disabled individual must meet only the net income limits. The table below shows both the current gross and net income eligibility standards for the continental United States, Guam and the Virgin Islands, effective from October 1, 1996 to September 30, 1997. Eligibility levels are slightly higher for Alaska and Hawaii. Income includes wages, salaries, commission, social security benefits, SSI, veteran's benefits, child support, contributions, unemployment compensation, etc.

Table 23
Monthly Income Eligibility Limits

HOUSEHOLD SIZE	GROSS MONTHLY INCOME LIMITS	NET MONTHLY LIMITS
1	\$839	\$645
2	1,123	864
3	1,407	1,082
4	1,690	1,300
5	1,974	1,519
6	2,258	1,737
7	2,542	1,955
8	2,826	2,174
Each Additional Member	+ 284	+ 219

8. **Deductions** - Only the following are allowable deductions for food stamps: (a) **Standard Deduction** - Each household is allowed a standard deduction of \$134, (b) **Medical Deductions** - Elderly and/or disabled individuals may be entitled to a medical deduction

for any verified non-reimbursable medical expenses they incur during the certification period in excess of \$35 per month, (c) **Dependent Care** - The cost incurred (up to a maximum amount) for care of a child or other dependent in order for a household member to work, seek employment, attend training, or pursue education that is preparatory for employment, (d) **Child Support** - Legally obligated child support paid by a household member to or for a non-household member, (e) **Shelter Costs** - These costs include rent, mortgage, property taxes, insurance on the structure, utilities, etc.

9. **Resources** - The maximum allowable resource limits of all household members shall not exceed \$2,000 (\$3,000 for households containing a member 60 or over). Resources include cash on hand, bank accounts, stock, savings bonds, real property (other than home property), cars, boats, motors, motorcycles, vans, trailers, campers, etc.

Application Process

10. **Application Processing** - The application process includes completing an application, filing the form in the county in which the household lives, being interviewed, and having certain information verified. The application interview may be with a group of other applicants. Households that meet the following criteria will have their application acted upon within 7 calendar days: households with less than \$150 in monthly gross income and their liquid resources, such as cash or checking/savings' accounts less than \$100; the household's monthly rent/mortgage and utilities are more than the household's gross monthly income and liquid resources; the household is a destitute migrant or seasonal

farm worker provided the liquid resources are less than \$100. All other households shall have their application acted upon within 30 days from the date they apply.

Monthly Allotments

11. **Allotment Amounts** - The amount of food stamps a household actually receives depends on the number of people in the food stamp household and the amount of their net income. The table below shows the current maximum food stamp allotment levels by household size for the continental United States, which is in effect from October 1, 1996 to September 30, 1997.

Table 24

Maximum Monthly Allotments

HOUSEHOLD SIZE	ALLOTMENT LEVEL
1	\$120
2	220
3	315
4	400
5	475
6	570
7	630
8	720
Each additional member	+ 90

12. **Authorized Representative** - The head of household, spouse, or other responsible household member may designate an authorized representative to act on behalf of the household. This person may apply for benefits, obtain the benefits and/or use the benefits for the food stamp household.

13. ***Quarterly Reporting*** - Some households have to report their household situation quarterly on a quarterly report form. These households have to report on a quarterly basis regardless of whether there have been any changes in their situation.
14. ***Change Reporting*** - Households not required to quarterly report their household situation quarterly report form. These households have to report on a quarterly basis regardless of whether there have been any changes in their situation.
15. ***Fair Hearing*** - Any household not satisfied with any action of the agency that affects the participation in the FSP has a right to request a fair hearing. The State Department of Human Resources conducts fair hearings.
16. ***Ineligible*** - The following individuals are ineligible to receive food stamps: (a) anyone who is fleeing to avoid prosecution, custody, or confinement after a felony conviction under the law, (b) anyone in violation of his/her parole/probation, (c) anyone found guilty by a court of using food stamps to buy firearms, ammunition, or explosives, (d) anyone using food stamps to buy illegal drugs, (e) anyone convicted of a federal or state felony that has as an element the possession, use, or distribution of a controlled substance, (f) anyone found guilty by a court of selling food stamps of \$500 or more, (g) anyone who misrepresents his/her identity or residence in order to receive multiple food stamps benefits simultaneously (anyone found guilty of the items listed from c to g are permanently disqualified from receiving food stamp benefits for 10 years from the date of conviction).
17. ***Overissuance*** - Any household who receives food stamp benefits to which they are not entitled may have to pay them back. In addition, any individual who receives food stamp

benefits due to fraud maybe disqualified from participating in the FSP from one year to permanently, subject to prosecution and/or other penalties.

You cannot get food stamps if you:

You cannot get food stamps if you: (a) are on strike (unless you were eligible for food stamps before the strike or you have been locked out or permanently replaced); (b) are an illegal alien or one of certain kinds of legal aliens; (c) live in a hospital, a jail, or one of certain other kinds of institutions that serve meals; (d) are enrolled at least half-time in a college, unless you work 20 hours per week or are getting federal work-study money or are under 18 or are over 50 or are physically or mentally unfit or are getting AFDC benefits or are taking care of a small child or are getting help from the Job Training Partnership Act (JTPA); (e) have been disqualified because you have intentionally broke a FSP rule; (f) are cut off food stamps because you quit a job without a good reason or for not complying with food stamp work requirements.

APPENDIX B

ID NUMBER _____

**Questionnaire on the
Determinants of Non-participation of African Americans
in the Food Stamp Program
in Macon County**

**George Washington Carver
Agricultural Experiment Station
and
College of Agricultural, Environmental, and Natural Sciences

Tuskegee University**

1997

ID Number: _____

Questionnaire on the Determinants of Non-participation of African Americans in the Food Stamp Program in Macon County

Tuskegee University College of Agricultural, Environmental, and Natural Sciences

INTERVIEWER'S OPENING STATEMENT

INTERVIEWER: HELLO, I'M _____ and I'm an interviewer for a study being conducted by Tuskegee University, College of Agricultural, Environmental, and Natural Sciences.

PLEASE READ THIS INFORMATION TO HIM/HER.

Tuskegee University's College of Agricultural, Environmental, and Natural Sciences, in collaboration with the USDA Food and Consumer Service Agency, is surveying residents of the Macon County who are eligible to receive Food Stamps, but do not. We are interested in seeing why people do not participate so that the program can become more effective and "user friendly" to those who are intended to benefit from it.

Your participation is crucial to the success of this study. Please remember this is voluntary and the information you provide will be strictly confidential.

INTERVIEWER: Ask the respondent the following: Do you wish to participate? If the answer is yes, thank him as stated and proceed to the next section.

Thank you for agreeing to participate in this study.

INTERVIEWER: COMPLETE THE SECTION BELOW ONLY IF THE RESPONDENT AGREES TO PARTICIPATE

RESPONDENT CONSENT FORM

ID Number:

Respondent's Name: _____

Respondent's Address: _____

County: _____

Phone number: _____

Respondent's Signature

Interviewer's Signature

Pre-Questionnaire to Determine Eligibility

ID NUMBER _____

1. Are any of the members of your household currently receiving food stamps?
 1. Yes (**End interview and thank person**)
 2. No (**Continue**)
2. Does your household size and gross monthly income limits fit the following table?

Household Size	Gross Monthly Income Limits
1	\$831
2	\$1123
3	\$1407
4	\$1610
5	\$1174
6	\$1737
7	\$1155
8	\$2174
Each Additional Member	+\$284

If yes continue, if no end the interview.

3. Is anyone in your household 60 or more?
 1. Yes (**Go to Q4**)
 2. No (**Go to Q5**)
4. Does your household resources exceed \$3000?
 1. Yes (**End the interview**)
 2. No (**Continue with the interview**)
5. Does your household resources exceed \$2000?
 1. Yes (**End the interview**)
 2. No (**Continue with the interview**)

SECTION 1. MARITAL STATUS AND CHILDREN INFORMATION

1. Male or Female? (**DO NOT ASK BUT OBSERVE AND MARK**)
 1. Male
 2. Female
 2. What is your date of birth? _____ / _____ / _____
Month Day Year
98. Refused
 3. What is you current marital status?
 1. Never Married
 2. Married
 3. Separated
 4. Divorced
 5. Widowed
 6. Not married living with someone 7.
 - Other (Please Specify) _____
98. Refused
 4. Do you have any children?
 1. Yes
 2. No (**GO TO Q7**)

99. Don't Know (**GO TO Q7**) 98. Refused (**GO TO Q7**)
 5. How many children do you have? _____
 6. What is the age of your first and last child? 1st _____ Years Last _____ Years

SECTION 2: GENERAL HOUSEHOLD INFORMATION

 7. Counting yourself, how many people live in your household? Please count all people who usually live with you, including people not related to you.
(Please Specify) _____
 8. Please state the relationship, sex and age of all people living in your household.
Interviewer, please fill out this table.

Relationship	Sex	Age	Highest level of education completed
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			

9. Do you have a phone in your household?
1. Yes 2. No 98. Refused 99. Don't know

10. How do you **usually** get around if you want to go some place?
1. Walk 2. Take the bus
3. Take a taxi 4. Have some one to drive you
5. Borrow a car 6. Drive your own car
7. Other (**specify**) _____
98. Refused 99. Don't know

11. Do you have a handicap or physical limitation that makes it hard for you to get around?
1. Yes (**specify**) _____
2. No 98. Refused 99. Don't know

12. Are you aware that you may be eligible to receive Food Stamp benefits?
1. Yes 2. No 98. Refused 99. Don't know
13. Why have you not applied for Food Stamp benefits? (Check All That Apply)
1. Do not like to rely on government/Charity
 2. Too much paper work
 3. Probably not eligible
 4. Do not want to be seen shopping with food stamps
 5. Do not want people to know I need financial assistance
 6. Never got around to applying
 7. Someone told me not to bother
 8. Previous bad experience with Food Stamp Program
 9. Previous bad experience with Government Programs
 10. Application too personal
 11. Do not know how or where to apply
 12. Benefit too small for effort required
 13. Do not know reason
 14. Pride/embarrassment/stigma
 15. Believe in self-reliance and self help
 16. Other (please specify) _____
8. Refused 99. Don't know
14. Would you apply for Food Stamps if you could get cash instead of food coupons or a check?
1. Yes 2. No 98. Refused 99. Don't know
15. Would you apply for Food Stamps if you could get benefits credited to the plastic card, Electronic Benefits Transfer (EBT)?
1. Yes 2. No 98. Refused 99. Don't know
- The next questions are about how you might feel if you received food stamp benefits.**
16. If you got food stamps, I might go out of my way so people would not find out?
1. Yes 2. No 98. Refused 99. Don't know
17. If you got food stamps, I might not shop in certain stores because I don't what people there to know I use food stamps?"
1. Yes 2. No 98. Refused 99. Don't know
18. Have you or any one in your household ever got emergency food from a church, a food pantry, soup kitchen or a food bank?
1. Yes 2. No 98. Refused 99. Don't know
19. Do you or any one in your household get food or voucher to buy food, from any other kind of program?
1. Yes (GO TO Q11b) 2. No (GO TO Q12)
98. Refused (GO TO Q12) 99. Don't know (GO TO Q12)

11b. If yes please specify the type of voucher and the current amount?

Type of the voucher
1.
2.
3.

20. Have you or anyone in your household not been able to have enough to eat?

1. Yes 2. No 98. Refused 99. Don't know

21. Which of the following are reasons why you don't always have enough to eat?

(Check all that apply to you)

- | | |
|---|---------------------------------|
| 1. Not enough money for food | 2. Too hard to get to the store |
| 3. Do not have a working refrigerator | 4. Do not have a working stove |
| 5. Not able to cook or eat because of health problems | |
| 6. Other(Specify) _____ | 98. Refused |
| 99. Don't know | |

22. Which of the following accounts do you or does anyone in your household have at this time? (Check all that apply to you)

- | | |
|---------------------|--------------------|
| 1. Checking Account | 2. Savings Account |
| 3. Other Accounts | 98. Refused |
| 99. Don't know | |

23. How far do you live from the closest major grocery store? (Please specify) _____

24. How do you get to the major grocery store?

- | | |
|----------------|---------------------------------|
| 1. Walk | 2. Get a ride with friend |
| 3. Taxi | 4. Drive |
| 5. Ride a bike | 6. Other (Please Specify) _____ |

25. How do you get to other stores?

- | | |
|----------------|---------------------------------|
| 1. Walk | 2. Get a ride with friend |
| 3. Taxi | 4. Drive |
| 4. Ride a bike | 6. Other (Please Specify) _____ |

26. How close is your nearest neighbor?

98. Refused 99. Don't know

_____ Miles

27. Outside of your relatives who do you depend on for assistance?

(Please specify the kind of assistance) _____

28. Does he/she live far from you?

1. Yes 2. No 98. Refused 99. Don't know

29. Is there a different person outside those living with you that you call upon for financial emergencies?

1. Yes (GO TO Q52b) 2. No (GO TO Q53)
98. Refused (GO TO Q53) 99. Don't know (GO TO Q53)

29b. If yes, what is the relationship to you and how far do they live from you?

(Please specify) _____

30. Have you or anyone in your household grown fruits or vegetables, hunted, fished, or raised animals for food for your home use, in recent months or in season?

1. Yes (Please specify) _____
2. No _____ 98. Refused _____ 99. Don't know _____

30b. Do you or anyone in your household sell some of the food that you/they grow?

1. Yes (Please specify) _____
2. No _____ 98. Refused _____ 99. Don't know _____

SECTION 3. RESOURCES

31. Do you or any one in your household own any property (land)?

1. Yes (Please specify the acreage) _____
2. No _____ 98. Refused _____ 99. Don't know _____

32. Do you or any one in your household own an automobile?

1. Yes (Please specify make, year & condition) _____
2. No _____ 98. Refused _____ 99. Don't know _____

33. Do you or any one in your household make payments on an automobile?

1. Yes (Please specify amount) _____
2. No _____ 98. Refused 99. Don't know _____

34. Have you or anyone in your household sold, traded, or given away any of the following within the last three months?

1. Land (Please specify) _____
2. Buildings (Please specify) _____
3. Mobile Home (Please specify) _____
4. Cars, Vehicles (Please specify) _____
5. Money (Please specify) _____
6. Other (Please specify) _____
98. Refused _____ 99. Don't know _____

SECTION 4: INCOMING FINANCIAL INFORMATION

35. Do you or does anyone in your household receive any retirement benefits such as a government, private pension or annuity?

1. Yes (Please specify) _____
2. No _____ 98. Refused _____ 99. Don't know _____

36. Do you or does anyone in your household receive any Supplemental Security Income (SSI) from the federal, state or local government?

1. Yes (Please specify) _____
2. No _____ 98. Refused _____ 99. Don't know _____

37. Do you or does anyone in your household receive any veteran benefits?

1. Yes (Please specify) _____
2. No _____ 98. Refused _____ 99. Don't know _____

38. Do you or does anyone in your household receive any unemployment insurance or workman's compensation benefits?

1. Yes (Please specify) _____
2. No _____ 98. Refused _____ 99. Don't know _____

39. Do you or does anyone in your household receive any family assistance (AFDC-Aid, TANF)?
- | | | |
|-------------------------|-------------|----------------|
| 1. Yes (Please specify) | <hr/> | |
| 2. No | 98. Refused | 99. Don't know |
40. Do any women/men or children in your household receive food through the WIC program?
- | | | |
|-------------------------|-------------|----------------|
| 1. Yes (Please specify) | <hr/> | |
| 2. No | 98. Refused | 99. Don't know |
41. Do any children in your household receive free or reduced-cost meal at school daycare or Head Start Program ?
- | | | |
|-------------------------|-------------|----------------|
| 1. Yes (Please specify) | <hr/> | |
| 2. No | 98. Refused | 99. Don't know |
42. Do you or does anyone in your household receive free or reduced-cost for the elderly?
- | | | |
|-------------------------|-------------|----------------|
| 1. Yes (Please specify) | <hr/> | |
| 2. No | 98. Refused | 99. Don't know |
43. Do you or does anyone in your household receive any military assistance?
- | | | |
|-------------------------|-------------|----------------|
| 1. Yes (Please specify) | <hr/> | |
| 2. No | 98. Refused | 99. Don't know |
44. Do you or does anyone in your household receive any HUD utility assistance?
- | | | |
|-------------------------|-------------|----------------|
| 1. Yes (Please specify) | <hr/> | |
| 2. No | 98. Refused | 99. Don't know |
45. Do you or does anyone in your household receive any child support?
- | | | |
|-------------------------|-------------|----------------|
| 1. Yes (Please specify) | <hr/> | |
| 2. No | 98. Refused | 99. Don't know |
46. Do you or does anyone in your household receive any alimony?
- | | | |
|-------------------------|-------------|----------------|
| 1. Yes (Please specify) | <hr/> | |
| 2. No | 98. Refused | 99. Don't know |
47. Does anyone in your household receive income for payment from roomers or boarders?
- | | | |
|-------------------------|-------------|----------------|
| 1. Yes (Please specify) | <hr/> | |
| 2. No | 98. Refused | 99. Don't know |
48. Is anyone applying for or receiving educational financial assistance?
- | | | |
|-------------------------|-------------|----------------|
| 1. Yes (Please specify) | <hr/> | |
| 2. No | 98. Refused | 99. Don't know |
49. Does anyone have Medicare, Medicaid, private insurance or premiums including cost belonging to an HMO to help pay for medical expenses?
- | | | |
|---|-------------|----------------|
| 1. Yes (Please specify name and amount) | <hr/> | |
| 2. No | 98. Refused | 99. Don't know |
- SECTION 5: OUTGOING FINANCIAL INFORMATION**
50. Do you or does anyone in your household pay for someone to baby sit or care for a child or disabled adult so that a household member can go to work, go to school or training?
- | | | |
|-------------------------|-------------|----------------|
| 1. Yes (Please specify) | <hr/> | |
| 2. No | 98. Refused | 99. Don't know |

51. Do you or does anyone in your household pay for child-care including tuition, daycare, and child support payments?
1. Yes (Please specify) _____
 2. No 98. Refused 99. Don't know
52. Do you or does anyone in your household pay for transportation?
1. Yes (Please specify) _____
 2. No 98. Refused 99. Don't know
53. If you, anyone in your household, or a neighbor own an automobile, how much do you pay in gasoline per week? (Please specify) _____
54. Does anyone have dentist expenses, or other health care related services?
1. Yes (Please specify name and amount) _____
 2. No 98. Refused 99. Don't know
55. Does anyone have hospital or nursing care expenses?
1. Yes (Please specify name and amount) _____
 2. No 98. Refused 99. Don't know
56. Do you pay anyone you live with for room and meals?
1. Yes (Please specify) _____
 2. No 98. Refused 99. Don't know
57. Did you or anyone in your household have any other expenses?
1. Yes (Please specify) _____
 2. No 98. Refused 99. Don't know
58. Which of the following best describes where you live now?
1. A place you own 2. A place you are buying
 3. A place you are renting 4. A place that is rent free
 5. You are homeless 6. Other (Specify) _____
 98. Refused 99. Don't know

Part B: Utilities:

59. Please list the approximate cost for your household.

Utility Cost per Month	Amount
1. Telephone	_____
2. Electricity	_____
3. Gas for Heating and Cooking	_____
4. Oil for Heating and Cooking	_____
5. Water and Sewage	_____
6. Garbage and Trash	_____
7. Cable TV	_____
8. Other	_____

SECTION 6: EDUCATION

60. What is your highest level of formal education completed?
- | | |
|------------------------------------|-------------------------------------|
| 1. Never attended | 2. Eighth grade or less |
| 3. Some high school | 4. High school diploma |
| 5. GED | 5. Some college or technical school |
| 7. Associate degree | 8. Bachelor's degree |
| 9. Graduate or Professional school | 10. Other |
| 99. Don't Know | 98. Refused |

In total, how many years of education have you completed? _____ Years

Part A: Family Background Information:

61. When you were growing up, would you say your family's annual income was?
- | | | | |
|--------------|-------------|----------------|---------|
| 1. Excellent | 2. Good | 3. Fair | 4. Poor |
| 5. Other | 98. Refused | 99. Don't know | |
62. As far, as you can remember at one time or another, did your family use any government assistance to make ends meet, i.e. food stamps, AFDC, WIC, or any other type of assistance?
- | | |
|-------------------------|----------------------------|
| 1. Yes (GO TO Q62b) | 2. No (GO TO Q63) |
| 98. Refused (GO TO Q63) | 99. Don't know (GO TO Q63) |
- 62b. If yes, how did you feel about this?
- | | |
|-------------|---------------------------------|
| 1. Good | 2. Fair |
| 3. Poor | 4. Other (Please Specify) _____ |
| 98. Refused | 99. Don't know |
63. When you were a child did you live with both of your parents?
- | | |
|-------------|----------------------------|
| 1. Yes | 2. No |
| 98. Refused | 99. Don't know (GO TO Q72) |
- 63b. If no, who did you live with and why?
- | | |
|---------------------------------|----------------|
| 1. Mother (Specify) _____ | |
| 2. Father (Specify) _____ | |
| 3. Grand mother (Specify) _____ | |
| 4. Other (Specify) _____ | |
| 98. Refused | 99. Don't know |

Part B: Mother's Background Information:

64. What is your mother's highest level of formal education completed?
- | | |
|------------------------------------|-------------------------------------|
| 1. Never attended | 2. Eighth grade or less |
| 3. Some high school | 4. High school diploma |
| 5. GED | 5. Some college or technical school |
| 7. Associate degree | 8. Bachelor's degree |
| 9. Graduate or Professional school | 10. Other |
| 99. Don't Know | 98. Refused |
65. Did your mother ever hold a full-time or continuous part-time job while you were growing up?
- | | | |
|-------------------------------|-------------|----------------|
| 1. Yes (Please Specify) _____ | | |
| 2. No | 98. Refused | 99. Don't know |

Part C: Father's Background Information:

66. What is your father's highest level of formal education completed?

- | | |
|------------------------------------|-------------------------------------|
| 1. Never attended | 2. Eighth grade or less |
| 3. Some high school | 4. High school diploma |
| 5. GED | 5. Some college or technical school |
| 7. Associate degree | 8. Bachelor's degree |
| 9. Graduate or Professional school | 10. Other |
| 99. Don't Know | 98. Refused |

67. Did your father ever hold a full-time or continuous part-time job while you were growing up?

- | | | |
|-------------------------|-------------|----------------|
| 1. Yes (Please Specify) | | |
| 2. No | 98. Refused | 99. Don't know |

SECTION 7. EMPLOYMENT AND ECONOMIC-RELATED INFORMATION:

68. Since completing your highest formal education, approximately how many years did you hold or have you currently held a job? _____ Years

98. Refused 99. Don't Know

61. What is your current work situation?

- | | | |
|--|----------------------------------|--|
| 1. Employed full-time: What type of work and where? | | |
| 2. Employed part-time: What type of work? | | |
| 3. Self employed What type of work? | | |
| 4. Unemployed (seeking work) | 5. Unemployed (not seeking work) | |
| 6. Retired | 7. Other (Specify) | |
| 98. Refused | 99. Don't know | |

70. Have you or anyone in your household quit a job within the last 60 days?

- | | | |
|-------------------------|-------------|----------------|
| 1. Yes (Please Specify) | | |
| 2. No | 98. Refused | 99. Don't know |

71. Have you ever received any employment training or employment services from any government program?

- | | | |
|-------------------------|-------------|----------------|
| 1. Yes (Please Specify) | | |
| 2. No | 98. Refused | 99. Don't know |

72. Is anyone else in your household working at a job for pay at this time?

- | | |
|------------------------|---------------------------|
| 1. Yes (GO TO Q72b) | 2. No(GO TO Q73) |
| 98. Refused(GO TO Q73) | 99. Don't know(GO TO Q73) |

72b. If yes please specify their relation to you, gender, type employment and level of education?

Interviewer, please fill out this table.

Relation	Gender	Type of Employment
1.		
2.		
3.		
4.		
5.		

Interviewer, say each of the options out loud so the respondent can choose.

73. What is your opinion of the state of the job market around here?

74. During the past few years, do you think the economy in this area has been getting worse, remained the same or getting better?

Given what you

75. Given what you think about the state of the job market and the economy in this area, how do you see yourself economically 5 to 10 years from now?

5. Other (Specify) _____

ID Number: _____

Questionnaire of the Determinants of Non-participation of African Americans in the Food Stamp Program in Selected Alabama Black Belt Counties

Tuskegee University College of Agricultural, Environmental, and Natural Sciences

INTERVIEWER'S EVALUATION FORM

INTERVIEWER: Answer the following questions.

Respondent's Name: _____

Where did the interview take place?

- Participants home or neighborhood
- Academic institution
- Other (Please Specify) _____

Date of Interview: _____ / _____ / _____
Mo. Day Year

Respondent's cooperation was:

- Excellent
- Good
- Fair
- Poor

What was the reliability of the information you gathered?

- Excellent
- Good
- Fair
- Poor

What was respondent's attitude toward you and the survey?

Were there any incidence(s) such as interruptions, language difficulties, etc. during the interview that may have a bearing on the interview responses? Specify?

In your opinion, what do you think about the respondent and the interview?

**POVERTY AND THE FOOD STAMP PROGRAM,
REASONS FOR NONPARTICIPATION: IMPLICATIONS
FOR AFRICAN AMERICANS IN LOUISIANA**

**Patricia E. McLean-Meyinsse, Principal Investigator
Norma Dawkins, Co-Principal Investigator
and
Grace Wasike, Co-Principal Investigator**

**College of Agricultural, Family and Consumer Sciences
Southern University and A&M College
Baton Rouge, Louisiana 70813**

**FINAL REPORT
PRESENTED TO FOOD NUTRITION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.**

JULY 1998

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EXECUTIVE SUMMARY

The study's objectives were (1) to identify the segments of low-income households in Louisiana not participating in the Food Stamp Program (FSP); (2) to examine what factors influenced the decision of low-income households not to participate in the FSP, and how demographic, socioeconomic, and geographic, (DSG) characteristics of these households affected nonparticipation in the program; and (3) to make policy recommendations based on the empirical analyses in objective two. The study used the chi-square tests for independence and the multinomial logit model (MLM) to determine whether statistically significant associations existed between respondents' reasons for not participating in the FSP and their DSG characteristics.

From the results, nonparticipants were about 40-years-old, male, married, African Americans, more educated, employed, and lived in large cities. Five main reasons led to nonparticipation in the FSP: stigma, transportation or health problems; agency-related problems; awareness; and other reasons. Problems with the agency and awareness were the main reasons for nonparticipation. Twenty-six percent of the respondents decided not to participate in the program because of agency-related problems; twenty-four percent were unaware of their eligibility; twenty-four percent gave "other" as their reason; twenty percent elected not to participate because of the stigma attached to food stamp use; and six percent attributed their nonparticipation to transportation or health problems.

The MLM's results suggested that age, gender, marital status, ethnicity, age of other household members, household size, education, enrollment in school or in training programs, employment status, property or vehicular ownership, and residential area influenced the probability of the event (reasons) for not participating in the FSP. Men, Caucasians, African Americans, households with members at least 60 years old, or those living in medium-sized towns had higher probabilities of not participating because of stigma than did women, other races, households with no elderly members, or residents in large cities. Transportation or health issues did not statistically significantly contribute to nonparticipation. Older household heads, widows or widowers, other races, households with members less than 60 years of age, larger households, or those with household heads in school or in training programs were more likely not to participate in the FSP because of agency-related problems as compared to their corresponding counterparts. Younger respondents, Caucasians, African Americans, less educated household heads, property owners, or those residing in small towns exhibited a greater likelihood of nonparticipation in the program because they were unaware of their eligibility. Other races, households with members above 19-22 years old, high-school graduates and above, unemployed respondents, or those from rural areas had higher probabilities of saying that other reasons curtailed their participation in the FSP than did Caucasians, households with children, respondents with less than a high-school level of education, or those who were employed or lived in large cities.

The following strategies may increase participation, (1) simplifying the application process, (2) reducing the paper work required, (3) informing low-income households of the changes in the FSP resulting from the 1996 Welfare Reform Act, and (4) encouraging household heads to have their households' eligibility assessed rather than making that determination themselves.

INTRODUCTION

The U.S. government has been involved in programs to alleviate hunger and to promote nutrition security for more than six decades, and constantly strives to improve the efficiency of the Federal food assistance (FFA) programs. In its quest to ensure efficiency in the FFA programs, the United States Department of Agriculture (USDA) has funded many research projects to find ways to improve these programs. Research findings on the Food Stamp Program (FSP) suggest that food stamp use increases food expenditure and, thereby, increases food consumption and nutrient intakes (Kendall and Kennedy; Kramer-LeBlanc, Basiotis, and Kennedy; Kuhn, LeBlanc, and Gundersen; *Nutrition Program Facts*). Although the Federal government's contributions to food and nutritional security are undeniable, there is renewed concern that welfare reform could unravel the national-nutrition foundation laid by FFA programs (Block Joy and Doisy; Burghardt, Gordon, and Parker; Devaney, Gordon, and Burghardt; Guthrie; Kennedy and Davis; Kennedy, McGarth Morris, and Lucas; Rose and Nestle).

The Personal Responsibility and Work Opportunities Reconciliation Act (PRWORA) of 1996 retained the FSP as an entitlement program but changed eligibility requirements for receiving food stamps. The Congressional Budget Office estimates that PRWORA will save \$22 billion for the FSP. Most of the saving will come from (1) denying food stamps to most legal immigrants; (2) placing a time limit on able-bodied adults' participation in the FSP; and (3) imposing across-the-board cuts in food stamp benefits (Levendahl; Kramer-LeBlanc, Basiotis, and Kennedy; Kuhn, LeBlanc, and Gundersen). Researchers predict that the decreased transfer payments will affect poor families' food consumption patterns significantly, and that consumption patterns will worsen in economic recessions. Lower household income levels will lead poor families and individuals to reduce food spending or to change the kinds of foods they eat, especially fresh fruits and vegetables (Kendall and Kennedy; Kuhn, LeBlanc, and Gundersen). This is a valid concern because prior to PRWORA, Rose and Oliveira found lower mean-energy intakes among food-insufficient households than in households reporting food sufficiency. Because of these concerns and pressure from state and local government officials, Congress reinstated FSP benefits to legal immigrants in June 1998.

The FSP is a voluntary FFA program designed to provide a nutritional safety net for the country's most economically vulnerable population. Despite its role in alleviating hunger and nutrition insecurity among resource-restricted households, not every eligible household or individual participates in the FSP. Nationally, food stamp participation levels are lower in rural than in urban areas with comparable poverty levels (Wolfe, et al.). Dodds, Ahluwalia, and Baligh reported that eligible households chose not to participate in the FFA and welfare programs because of program policies, benefits, and procedures. Nonparticipation in the FSP also may be linked to lack of information about the program (Blaylock and Smallwood).

In 1996, 13.7 percent of the U.S. population lived in poverty, and about 10.5 million households participated in the FSP. Louisiana's poverty rate was 20.6 percent in 1996 and 256,000 households participated in the FSP (*Statistical Abstract of the United States*; U.S. Department of Commerce, 1997a, 1997b). Although the number of participating households in Louisiana fell by

11,000 in 1996 as compared to 1995, poverty is still a problem in the state, especially in the rural areas and inner cities. U.S. population is heterogeneous; therefore, in dealing with national policy issues such as food and nutrition security, Congress must get reliable information from stakeholders at the state and local levels. This study is a step in that direction. It identifies some of the reasons why eligible households in Louisiana choose not to participate in the FSP and advances recommendations on how to improve the FSP in the state.

OBJECTIVES

The study's goal is to examine the reasons why eligible households are not participating in the FSP, especially African-American households. The specific objectives are as follows.

1. To identify the segments of low-income households in Louisiana not participating in the FSP.
2. To examine what factors influence the decision of low-income households not to participate in the FSP, and how demographic, socioeconomic, and geographic, (DSG) characteristics of these households affect nonparticipation in the program.
3. To make policy recommendations based on the empirical analyses in objective two.

DATA AND PROCEDURES

The Survey

The study's data were collected via a telephone survey of a random sample of low-income households in Louisiana during October to December 1997. Southern University's Department of Political Science conducted the survey. The survey was directed at household heads. After a call was answered, the interviewers did the following: (1) introduced themselves; (2) explained that they were calling on behalf of the Agricultural Economics program at Southern University which was conducting a statewide survey to find out why eligible households did not participate in the FSP; (3) told respondents that their households were randomly selected for the study; and (4) asked to speak to the household head. The interviewers assured each household head that (1) participation in the survey was voluntary, (2) the information would be kept strictly confidential and be used only for purposes of the study, and (3) that their names would never be associated with their answers. They also were told that with their cooperation and input the U.S. government would be better able to monitor the effectiveness of the FSP in serving low-income households.

When an interview was granted, the interviewers asked a short series of questions to screen for eligibility. The first question dealt with whether the household was currently receiving food stamps. If a household was not receiving food stamps, the interviewers asked follow-up questions about household size and gross monthly income from all sources other than government assistance (Appendix B). Responses on household size and gross monthly income were used to screen for eligibility. This approach is similar to the 1987-88 Low-Income Survey of the USDA's Nationwide

Food Consumption Survey (Lutz, et al.). The income eligibility criteria were as follows.

Income Eligibility Criteria

Persons in Household	Gross Monthly Income Limits
1	\$ 839
2	1,123
3	1,407
4	1,690
5	1,974
6	2,258
7	2,242
8	2,826
Each additional person	+ 284

Source: USDA. "Food Stamp, Resources, Income, and Benefits." October 1996, p. 2.

If the gross monthly incomes and household size indicated possible eligibility for food stamps, the interviewers brought this to the respondents' attention and then asked them to give their reasons for not applying for food stamp benefits. In addition to their reasons, data also were collected on DSG characteristics (respondents' age, gender, marital status, ethnicity, age of household members, household size, education, enrollment in school or training programs, employment status, property ownership, vehicle ownership of at least \$4,500, and geographic location of households). The initial sample contained 1,025 respondents; however, only 751 respondents answered all questions.

The Models

In Fiscal Year 1995, households receiving food stamps had the following characteristics: (1) large numbers of children or elderly persons; (2) a high percentage of single parents and female participants; (3) more adult female participants than male participants; and (4) more Caucasians than African Americans and Hispanics (*Food Stamp Facts*). Based on these data and the literature, the study hypothesized that nonparticipants were more likely to be men, married, Caucasians, African Americans, to be without children, to have a high school education or above, to be in some school or training programs, to own property or vehicles, and live outside large cities. The study used univariate (chi-square) and multivariate (multinomial logit) analyses to determine the relationships between the selected DSG characteristics and respondents' reasons for not participating in the FSP.

The chi-square contingency test for independence was used to show whether relationships existed between DSG characteristics and respondents' reasons for not participating in the FSP. Because the chi-squared test is univariate, it cannot measure the combined influence of a group of explanatory variables on a specific dependent variable. These types of analyses need multivariate

modeling techniques such as the multinomial logit modeling (MLM) technique. The MLM technique was used to examine the relationships between DSG characteristics and reasons for nonparticipation in the FSP. Given the unordered responses, MLM is an appropriate model for estimating the unknown parameters. Ordinary least squares estimation technique is inappropriate because it yields biased regression coefficients when dependent variables are discrete (Maddala). MLM derives unbiased maximum likelihood parameter estimates.

The MLM (Greene, 1993) examined how DSG characteristics influenced respondents' reasons for not participating in the FSP. The model asserts that the probability that the i th respondent will select reason j ($y_i = j$) or k ($y_i = k$) is determined by his or her DSG characteristics. Further, the probability of selecting reason j over k can be expressed as follows.

$$1. \quad P_{ij} = [U_{ij} (y_i = j) > U_{ik} (y_i = k)] = \beta_j' X_i + \mu_{ij} \quad (j = 0, 1, 2, 3, 4; k = 0, 1, 2, 3, 4),$$

where

- P_{ij} = probability associated with the i th respondent's selection of the j th reason ($y_i = j$)
- U_{ij} = the i th respondent's personal utility function associated with the choice of j
- U_{ik} = the utility the i th respondent assigns to reason k
- β_j = the vector of estimated parameters
- X_i = the vector of independent variables (respondents' DSG characteristics)
- μ_{ij} = the vector of random errors.

The probability of the MLM can be written as

$$2. \quad P_{ij} = e^{\beta_j' X_i} / \sum_k e^{\beta_k' X_i}$$

and the J log-odds ratio as

$$3. \quad \ln (P_{ij} / P_{ik}) = \beta_j' X_i + \mu_i,$$

where

- P_{ik} = the probability of $Y_i = k$ ($k = j - 1$).

The odds ratio, P_{ij} / P_{ik} , depends on the vector of explanatory variables (X_i) and not on the other odds ratios (Liao). The marginal effects of the regressors on the response probabilities can be computed as follows:

$$4. \quad \partial P_{ij} / \partial X_i = P_{ij} (\beta_j - \beta_j k) + \mu_i.$$

The log-likelihood function for the MLM can be written as

$$5. \quad \ln L = \sum_i \sum_j d_{ij} \ln [P_{ij} / P_{ik}],$$

where

$$d_{ij} = 1 \text{ if } j \neq k, 0 \text{ otherwise.}$$

Respondents gave 17 reasons why their households chose not to participate in the FSP. Because of the similarities in many of the responses, the 17 reasons were reclassified into five categories as follows: (1) stigma (did not like to rely on government charity, did not want to be seen shopping with food stamps, did not want people to see they needed financial assistance); (2) transportation or health (transportation problem, health or morbidity problem); (3) agency-related problems (too much paper work, previous bad experiences with food stamp and other government programs, application too personal, benefits too small for the efforts required, language/literacy barriers); (4) awareness (did not know how or where to apply, probably not eligible); and (5) other reasons (never got around to applying, was told not to bother, situation/income changed, did not know the reason). The dependent variable (*REASON*) comprises the five-response categories.

Table 1 shows the explanatory and dependent variables used in the MLM and their definitions. All the explanatory variables, except age, household size, and household members in the selected age groups, are binary. The logit procedure in *LIMDEP 7.0* (Greene, 1995) is used to estimate the log-likelihood function for respondents' reasons for nonparticipation in the FSP, to generate the unknown parameters, and to compute the marginal effects. The marginal effects of all regressors on the response probabilities are computed for a unit change in each regressor while holding the other regressors at their sample means.

Descriptive Statistics

Twenty percent of the household heads chose not to participate in the FSP because of the stigma associated with receiving public assistance: did not like to rely on government charity (15 percent); did not want to be seen shopping with food stamps (3 percent); and did not want people to see they needed financial assistance (2 percent). Six percent did not participate because of lack of transportation (4 percent), and health/ morbidity problems (2 percent). Twenty-six percent of the respondents said they decided not to participate in the FSP because of agency-related problems: too much paperwork (9 percent); previous bad experience with the FSP (6 percent); previous bad experience with other federal assistance programs (2 percent); the application was too personal (3 percent); the benefits were too small for the efforts required (5 percent); and language/literacy

barriers (1 percent). Twenty-four percent were unaware of several aspects of the FSP: did not know how or where to apply (7 percent); probably not eligible (17 percent). In the "other" category, 15 percent never got around to applying; 3 percent said they were told not to bother; 3 percent indicated their situation/income changed; and 3 percent said they had no reasons for not applying for food stamps.

The average age of respondents was 40.22 years. Thirty-one percent were men, and 40 percent were single. Fifty-four percent of the respondents were African Americans. Seventy-two percent of the households had members aged 30-59 years. The average household size was 1.86 persons. Seventy-seven percent had a high-school level of education or above; sixty-two percent of the respondents were employed; twenty-seven percent owned some property; twenty-nine percent owned vehicles valued at least \$4,500; and 40 percent lived in large cities (table 2).

EMPIRICAL RESULTS AND DISCUSSION

Results from the Chi-square Model

Table 3 gives the results from the chi-square contingency tests for independence between the five-response categories and household characteristics. The results indicate that statistically significant associations exist between the five-response categories and age, gender, marital status, ethnicity, number of household members aged <5, 13-22, and 31-59; household size; educational levels; enrollment in school or training programs; employment status; vehicle ownership; previous food stamp applications; and geographical area.

Thirty-nine percent of the 35-44 year-old respondents mentioned problems with the agency as their main reason for not applying for food stamp benefits. From the results, men were more likely to cite stigma as their main reason for not participating in the FSP; women were more likely to say other reasons deterred them from participating in the program. Thirty-five percent of widows or widowers listed agency-related problems as their primary reason for not participating in the FSP compared to 23 percent of other single respondents. Thirty percent of African Americans said agency-related problems contributed to their nonparticipation, while 28 percent of Caucasians were unaware that they may be eligible to participate in the FSP. Households with children less than 5 years old, those with teenagers, or those with 31-59 year-old members gave agency-related problems and "other" as their primary reasons for nonparticipation in the program. Households with greater than three persons listed agency-related problems as their main reason for not participating in the FSP.

Fifty-two percent of respondents with a high-school education or above indicated that agency-related problems prevented them from participating in the program; those with less than a high school education indicated awareness as their main reason for not participating. Those who were in school or in training programs (32 percent) indicated that agency-related problems had caused them not to apply for food stamps. If respondents were employed, they gave agency-related problems (28 percent) and awareness (26 percent) as their main reasons for not participating in the

FSP. If they were unemployed, respondents indicated "other" as their reasons for nonparticipation. Respondents who owned vehicles tended to be unaware that they may be eligible to participate in the FSP. Those previously applying for food stamps were more likely to give agency-related problems as their reasons for not applying. Households in rural areas indicated that other reasons caused them not to participate in the FSP. Thirty-five percent of those living in small towns said they were unaware of their eligibility to participate. Thirty-one percent of medium-sized town residents listed stigma as the main reason for not participating in the FSP. Reasons were invariant to having children in the household who were between 5-12 years old, household members between 23-30 years old, or at least 60 years old, and to property ownership.

Results from the Multinomial Logit Model

Table 4 presents the results from the MLM showing how the selected DSG characteristics influence the probability of respondents' reasons for not participating in the FSP. The table shows ten sets of parameters with standard errors, and goodness-of-fit coefficients (log-likelihood and chi-square coefficients). The statistically significant coefficient for the model's chi-square (307.18) with 76 degrees of freedom indicates that this model performs better than the intercept-only model. The results suggest that age, gender, marital status, ethnicity, number of household members aged 19-22, 31-59, or at least 60 years old, household size, education, enrollment in school or in training programs, employment status, property and vehicular ownership, and geographical area influence the probability of respondents' reasons for not applying for food stamp benefits.

The statistically significant coefficient for age suggests that older respondents are more likely to list agency-related problems over stigma as their main reason for not participating in the FSP program. Men are less likely to give agency-related problems, awareness, and other reasons over stigma as their reasons for nonparticipation. Widows or widowers are more likely to advance transportation or health, agency-related problems, or other reasons over stigma as their reasons for deciding not to apply for food stamp benefits. Widows or widowers' odds of attributing their nonparticipation to awareness versus transportation or health, or to awareness rather than agency-related problems are lower than for single-never-married respondents.

Caucasians and African Americans are less likely to give agency-related problems and other reasons over stigma, agency-related problems over transportation or health problems, and other versus awareness as factors preventing them from participating in the FSP. Caucasians and African Americans are more likely to select awareness over agency-related problems; Caucasians are less likely to choose other reasons over transportation or health. Households with persons aged 19-22 years are more likely to select other reasons over stigma, other reasons over transportation or health, awareness and other reasons over agency-related problems, and other reasons over awareness for their nonparticipation in the program. Households with members aged 31-59 years are less likely to say their nonparticipation results from other reasons than from agency-related problems. Respondents whose households have elderly members (aged 60 years or older) are less likely to give transportation or health, or agency-related problems over stigma as their reasons for not participating in the program, but are more likely to link their decisions to awareness and other reasons than to

agency-related problems. As household size increases, agency-related problems mount triggering nonparticipation. The probability that a larger household chooses other reasons instead of agency-related problems for not participating in the FSP is less than that of a smaller household.

Respondents with a high-school level of education or above are less likely to select unawareness over stigma, transportation or health, or agency-related problems as their reason for electing not to participate in the FSP. They have a greater likelihood of saying other reasons prevent their participation. Those in school or in training programs are more likely to list problems with the agency, awareness, and other reasons than stigma, transportation, or health as their main reasons for nonparticipation. Employed respondents are less likely to indicate that transportation, health, or other reasons deter their participation in the FSP; they are more likely to attribute their nonparticipation to stigma, agency-related problems, and awareness.

Property owners have a higher likelihood of advancing unawareness of their eligibility to participate in the program as their main reason for nonparticipation. A similar situation exists for respondents owning vehicles. Respondents in rural areas feel transportation, agency-related problems, awareness, and other reasons rather than stigma prevent their participation in the FSP; those living in small towns gave awareness over stigma as their main reason for not being involved in the FSP. Respondents living in medium-sized towns are less likely to attribute their nonparticipation to a lack of awareness of their eligibility, than to stigma. Reasons for nonparticipation are invariant to being married or to having household members between 23-30 years old.

The marginal effects from the MLM are given in table 5. The marginal effects measure adjustments in the probabilities for changes in specific regressors while holding other regressors at their sample means. The results in table 5 correspond to the probabilities of the log-odds ratios in table 4. The statistically significant coefficients show which explanatory variables influence the five-response categories the most. The results suggest that a unit increase in age increases the likelihood that respondents' reasons for not participating in the FSP are related to agency-related problems rather than awareness. A unit change from a female-headed household to a male-headed household increases the likelihood by almost 11-percentage points that stigma prevents men's participation in the FSP. A unit change from a household headed by a single-never-married person to one headed by a widow or widower lowers the probability of stigma by 14-percent points and increases the likelihood of agency-related problems by 20-percentage points. Therefore, agency-related problems prevent widows or widowers from participating in the FSP.

Other races are more likely to have problems with the agency rather Caucasians or African Americans. Awareness and stigma are more likely to cause nonparticipation in these ethnic groups rather than in other ethnic groups. For household members aged 19-22, other reasons are the most important factor contributing to nonparticipation, agency-related problems are key factors to the 31-59 age group; stigma is a key determinant of FSP participation in households with elderly members. Larger households have more agency-related problems than smaller households. This is also the situation with respondents enrolled in school or in training programs. Respondents with a high-

school level of education or above are more likely to base their decisions on other reasons; those with below high school education are less aware of their eligibility.

Unemployed respondents are 9-percentage points more likely to say other reasons cause them not to participate in the FSP than employed respondents. Property owners are more likely to be unaware of their eligibility than nonproperty owners. Respondents living in rural areas are 18-percentage points less likely than those in large cities to list stigma as preventing them from participating in the FSP; other reasons are more likely for their nonparticipation. Small town residents have fewer problems with stigma; their reason stems from lack of awareness. Respondents from medium-sized towns are more likely to say stigma contributed to their nonparticipation than lack of awareness.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The study's goal was to examine reasons why eligible households were not participating in the FSP, especially African-American households. The specific objectives were (1) to identify the segments of low-income households in Louisiana not participating in the FSP; (2) to examine what factors influenced the decision of low-income households not to participate in the FSP, and how DSG characteristics of these households affected nonparticipation in the program; and (3) to make policy recommendations based on the empirical analyses in objective two.

From the descriptive statistics, nonparticipants were about 40 years, male, married, African Americans, more educated, employed, and lived in large cities. Respondents gave five main reasons for their households' nonparticipation in the FSP: stigma; transportation or health problems; agency-related problems; awareness; and other reasons. However, problems with the agency seemed to be the main deterrent to participation; twenty-six percent of the respondents said this was the main reason why they decided not to participate in the program.

The chi-square tests for independence indicated that the five-response categories were associated with all the DSG characteristics, except households with members aged 5-12, 23-30 or at least 60 years old, and those owning property. From the chi-square analyses, household heads between 35-44 years old indicated that agency-related problems prevented their participation in the FSP. Men gave stigma as their main reason for nonparticipation; female respondents said other reasons prevented them from participating in the FSP. Widows and widowers and African Americans chose not to participate because of agency-related problems. Other reasons triggered single-never-married respondents' decisions not to participate; Caucasians' decisions were more likely to be driven by stigma and a lack of awareness. Households with three or more persons tended not to participate because of agency-related problems.

Respondents not completing high school were unaware of their eligibility to participate in the FSP. If respondents were in school or in job training programs, were employed, did not own property, or had applied for food stamp benefits previously, they gave problems with the agency as their main reason for electing not to participate in the FSP. Property or vehicle owners tended to be

less aware of their eligibility than their corresponding counterparts. Households that had applied for food stamp benefits previously were more likely to indicate that their decision not to participate was shaped by their past experiences with the agency administering food stamp benefits. Residents from rural areas, small-towns, medium-sized towns, or from large cities were more likely to give other reasons, awareness, stigma, and agency-related problems, respectively, as their reasons for nonparticipation.

For the most part, the MLM's results supported those generated by the chi-square analyses. They indicated that age, gender, marital status, ethnicity, the ages of other household members, household size, education, enrollment in school or in training programs, employment status, property or vehicular ownership, and residential area influenced the probability of the event (reasons) for not participating in the FSP. The results further suggested that men, Caucasians, African Americans, households with members at least 60 years old, or those living in medium-sized towns had higher probabilities of not participating because of stigma than did women, other races, households with no elderly members, or residents in large cities. Transportation or health issues did not statistically significantly contribute to nonparticipation.

Older respondents, widows or widowers, other races, households with members less than 60 years of age, larger households, or those with household heads in school or in training programs were more likely not to participate in the FSP because of agency-related problems as compared to their corresponding counterparts. Younger respondents, Caucasians, African Americans, less educated household heads, property owners, or those residing in small towns exhibited a greater likelihood of nonparticipation in the program because they were unaware of their eligibility. Other races, households with members above 19-22 years old, high-school graduates or above, unemployed respondents, or those from rural areas had higher probabilities of saying that other reasons curtailed their participation in the FSP than did Caucasians, households with children, respondents with less than a high-school level of education, or those who were employed or lived in large cities.

The FSP has made significant contributions in alleviating hunger and malnutrition among the country's most economically vulnerable population. It is the second largest Federal assistance program, and it constantly battles fraud and inefficiency to ensure that benefits reach truly deserving groups. While stringent measures are needed to curtail fraud and promote efficiency, they must not be too unwieldy so as to prevent eligible households from participating in the program. Respondents gave five main reasons for not participating in the FSP; agency-related problems were the major deterrent to participation in 751 households in Louisiana. One recommendation emerging from the study's findings is that the USDA could make the food-stamp-application process more user-friendly. The agency could achieve this by reducing the paper work required and the application length, and by simplifying the application. The stigma attached to food stamp use is being addressed. Stigma may be eliminated in the future as more food stamp recipients in Louisiana are given Electronic Benefit Transfer (Louisiana Purchase) cards to buy food.

In 1996, Congress passed and President Clinton signed PRWORA in law. The Act changed the FSP considerably, restricting benefits to able-bodied adults without dependent children and to most legal immigrants, and requiring states to implement welfare reform by July 1997. Louisiana implemented the changes in January 1997. This study was done between October and December 1997, and it found 1,025 eligible households that were not participating in the FSP. Twenty percent of the household heads were unaware of their household's eligibility to receive food stamp benefits. Household heads with less than a high-school level of education were about 16-percentage points less likely to know of their households' eligibility than those with a high-school diploma or above. Because of lower educational levels, some respondents may think that PRWORA eliminated all food stamp benefits, which resulted in their decisions not to apply for food stamp benefits. Awareness also was a problem for younger respondents, Caucasians and African Americans, property owners, and small-town residents.

Louisiana's policy makers need to take greater steps to inform all its low-income, resource-restricted residents, particularly the previous population segment, about the curtailment in food stamp benefits, but encourage these households to have their food stamp eligibility assessed. The message should explain that despite PRWORA's passage, the Federal government is committed to maintaining the food and nutritional safety net for economically vulnerable Americans, and for that goal to be realized, eligible households must participate in the food assistance programs. Further, the Cooperative Extension Service and scientists in the College of Agricultural, Family and Consumer Sciences at Southern University should educate its stakeholders (low-income African-American households) about PRWORA. The approach should explain that PRWORA curtailed food stamp benefits to some individuals and households, but that it did not eliminate benefits totally. Their forum could include workshops, brochures, field days, churches, other civic organizations, and the media (newspapers, radio, and television).

REFERENCES

- Blaylock, J.R., and D.M. Smallwood. "Reasons for Nonparticipation in the Food Stamp Program." *W.J. Agr. Econ.* 9,1 (1984):117-126.
- Block Joy, A., and C. Doisy. "Food Stamp Nutrition Education Program: Assisting Food Stamp Recipients to Become Self-Sufficient." *J. Nutr. Educ.* (1996):123-126.
- Burghardt, J.A., A.R. Gordon, and T.M. Fraker. "Meals Offered in the National School Lunch Program and the School Breakfast Program." *Am. J. Clin.Nutr.* (Suppl.1995):187S-198S.
- Devaney, B.L., A.R. Gordon, and J.A. Burghardt. "Dietary Intakes of Students." *Am. J. Clin. Nutr.* 61(Suppl. 1995):205S-212S.
- Dodds, J.M., I. Ahuwalia, and M. Baligh. "Experiences of Families Using Food Assistance and Welfare Programs in North Carolina: Perceived Barriers and Recommendations for Improvement." *J. Nutr. Educ.* 28, 2 (1996):101-108.
- Food Stamp Facts.* "Some Food Stamp Facts," December 1997.
<http://www.usda.gov/fcs/stamps/fsfacts..htm>.
- Greene, W.H. *Econometric Analysis.* Macmillan Publishing Company: New York, 1993.
- Greene, W.H. *LMDEP Version 7.0.* New York, N.Y.: Econometric Software, Inc., 1995.
- Guthrie, J. "USDA Acts to Improve School Meals and Children Nutrition." *Food Review.* 19,2(May-August 1996):55.
- Kendall, A., and E. Kennedy. "Position of the American Dietetic Association: Domestic Food and Nutrition Security." *J. Amer. Diet. Assoc.* 98,3(1998):337-342.
- Kennedy E., and C. Davis. "U.S. Department of Agriculture School Breakfast Program." *Am. J. Clin. Nutr.* 67 (Suppl.1998):798S-803S.
- Kennedy, E., P.McGarth Morris, and R. Lucas. "Welfare Reform and Nutrition Programs: Comptemporary Budget and Policy Realities." *J. Nutr. Educ.* 28,2(1996):67-70.
- Kramer-LeBlanc, C.S., P.P. Basiotis, and E.T. Kennedy. "Maintaining Food and Nutrition Security in the United States with Welfare Reform." *Amer. J. Agr. Econ.* 79,5(1997):1600-1607.
- Kuhn, B.A., M. LeBlanc, and C. Gundersen. "The Food Stamp Program, Welfare Reform, and the Aggregate Economy." *Amer. J. Agr. Econ.* 79,5(1997):1595-1599.

Levedahl, J.W. "New Welfare Law Reduces Food Stamp Benefits." *Food Review*. 19,3(1996):32-33.

Liao, T.F. *Interpreting Probability Models: Logit, Probit, and Other Generalized Linear Models*. Sage University Paper Series on Quantitative Applications in the Social Sciences, 07-101, 1994.

Lutz, S.M., D.M. Smallwood, J.R. Blaylock, and M.Y. Hama. *Changes in Food Consumption and Expenditures in Low-Income American Households During the 1980's*. S-B870. U.S. Dept. Agr., Econ. Res. Serv., November 1993.

Maddala, G.S. *Limited-Dependent and Qualitative Variables in Econometrics*. New York: Cambridge University Press, 1983.

Nutrition Program Facts. "Nutrition Program for the Elderly." December, 1997.
<http://www.usda.gov/fcs/ogapi/nperfor~1.htm>.

Rose, D., and V. Oliveira. *Validation of a Self-Reported Measure of Household Food Insufficiency with Nutrient Intake Data*. USDA, Economic Research Service, TB-1863. August 1997.

Rose D., and M. Nestle. "Welfare Reform and Nutrition Education: Alternative Strategies to Address the Challenges of the Future." *J. Nutr. Educ.* 28,2(1996):61-66.

U.S. Department of Agriculture. "Food Stamp, Resources, Income, and Benefits." Food Consumer Service, October 1996.

U.S. Dept. of Commerce, U.S. Bureau of the Census. *Statistical Abstract of the United States 1997*. 117th Edition, Washington, D.C., 1997.

. Table 19. "Percent of Persons in Poverty, by State: 1994, 1995, and 1996," September 1997a.
<http://www.census.gov/hhes/poverty/histpov/hstpov19.html>.

. Table 9. "Poverty of Persons, by Region: 1959 to 1996," September 1997b.
<http://www.census.gov/hhes/poverty/histpov/hstpov9.html>.

Wolfe, W.S., C.M. Olson, A. Kendall, and E.A. Frongillo, Jr.. "Understanding Food Insecurity in the Elderly: A Conceptual Framework." *J. Nutr. Educ.* 28,2(1996):92-100.

APPENDIX A:

LIST OF TABLES

Table 1: Definitions and Variables Used in the Multinomial Logit Model

Variable Name	Variable Definitions
Explanatory Variables:	
<i>AGE</i>	Respondents' age in years
<i>GENDER</i>	Male = 1; Female = 0
<i>MARRIED</i>	Married = 1; Otherwise = 0
<i>WIDOW/ER</i>	Widow/Widower = 1; Otherwise = 0
<i>SINGLE/NEVER MARRIED</i>	Reference Category
<i>WHITE</i>	Caucasians = 1; Otherwise = 0
<i>BLACK</i>	African Americans = 1; Otherwise = 0
<i>OTHER RACE</i>	Reference Category
<i>AGE 0-18</i>	Reference Category
<i>AGE 19-22</i>	Number in household between 19-22 years old
<i>AGE 23-30</i>	Number in household between 23-30 years old
<i>AGE 31-59</i>	Number in household between 31-59 years old
<i>AGE ≥ 60</i>	Number in household 60 years old or older
<i>HHSIZE</i>	Number of household members
<i>HIGHSCH</i>	High-school diploma and above = 1; Otherwise = 0
<i>INSCHOOL</i>	In school or in a training program = 1; Otherwise = 0
<i>EMPLOYED</i>	Household head is employed = 1; Otherwise = 0
<i>PROPERTY</i>	Real estate ownership = 1; Otherwise = 0
<i>VEHICLE</i>	Vehicle valued at least \$4,500 = 1; Otherwise = 0

Table 1: Definitions and Variables Used in the Multinomial Logit Model (Continued)

Variable Name	Variable Definitions
Explanatory Variables:	
<i>RURAL</i>	Lives in a rural area = 1; Otherwise = 0
<i>SMTOWN</i>	Lives in a small town = 1; Otherwise = 0
<i>MSTOWN</i>	Lives in a medium-sized town = 1; Otherwise = 0
<i>LARGE CITY</i>	Reference Category
Dependent Variable:	
<i>REASON</i>	Reasons for Nonparticipation in the FSP Stigma = 0; Transportation/Health = 1; Agency-Related Problems = 2; Awareness = 3; Other = 4

Table 2: Households' DSG Characteristics

Characteristics	Mean	Std. Dev.
Age (years)	40.22	17.58
Male	0.31	0.46
Single/Never Married	0.40	0.49
Married	0.44	0.50
Widow/Widower	0.13	0.33
Caucasians	0.44	0.50
African Americans	0.54	0.50
Household Members < 5 (years)	0.23	0.54
Household Members 5-12 (years)	0.55	0.88
Household Members 13-18 (years)	0.37	0.75
Household Members 19-22 (years)	0.22	0.52
Household Members 23-30 (years)	0.46	0.75
Household Members 30-59 (years)	0.72	0.85
Household Members \geq 60 (years)	0.28	0.54
Household Size	1.86	1.63
< High School	0.23	0.42
High School	0.34	0.47
GED	0.06	0.24
VoTech	0.11	0.31
< Four Years of College	0.19	0.39
College Graduate	0.07	0.26
School/Training Program	0.24	0.43
Employed	0.62	0.49
Property Ownership	0.27	0.44
Vehicle Ownership (\geq \$4,500)	0.29	0.46
Rural Area	0.13	0.34
Small Town (population <10,000)	0.17	0.38
Medium-Sized Town (population 10,000 - 50,000)	0.29	0.46
Large City (population >50,000)	0.40	0.49

Table 3: Response Categories by DSG Characteristics

	0	1	2	3	4 ^a
	Percentages ^b				
Total	20	6	26	24	24
Characteristics					
<i>AGE</i>					Chi-Square ^c
15-24	24	4	16	25	32
25-34	20	1	26	29	25
35-44	19	5	39	21	17
45-54	19	12	29	22	18
55-64	19	3	25	32	20
≥ 65	19	17	23	16	25
					69.954***
<i>GENDER</i>					
Male	26	7	26	24	18
Female	17	6	26	25	26
					11.639**
<i>MARITAL STATUS</i>					
Single	20	4	23	25	27
Married	25	2	26	26	21
Widow/er	8	19	35	17	22
					65.236***
<i>ETHNICITY</i>					
Caucasians	25	9	21	28	17
African Americans	16	4	30	21	29
					37.119***
<i>PERSONS <5</i>					
<i>YEARS OLD</i>					
< 2 persons	21	6	26	24	24
≥ 2 persons	15	2	19	31	33
					17.290***
<i>PERSONS 5-12</i>					
<i>YEARS OLD</i>					
< 2 persons	20	7	25	25	24
≥ 2 persons	20	2	31	23	15
					5.712

Table 3: Response Categories by DSG (Continued)

	0	1	2	3	4 ^a	
	Percentages ^b					
Total	20	6	26	24	24	
Characteristics						Chi-Square ^c
<i>PERSONS 13-18</i>						
<i>YEARS OLD</i>						
< 2 persons	20	6	24	25	25	
≥ 2 persons	20	3	46	21	10	18.634***
<i>PERSONS 19-22</i>						
<i>YEARS OLD</i>						
< 2 persons	21	6	27	24	23	
≥ 2 persons	6	0	6	43	46	24.290***
<i>PERSONS 23-30</i>						
<i>YEARS OLD</i>						
< 2 persons	20	6	26	24	25	
≥ 2 persons	22	3	28	29	18	3.991
<i>PERSONS 31-59</i>						
<i>YEARS OLD</i>						
< 2 persons	20	7	23	26	25	
≥ 2 persons	21	2	39	19	19	20.415***
<i>PERSONS 60</i>						
<i>YEARS OR OLDER</i>						
< 2 persons	19	6	27	24	24	
≥ 2 persons	33	6	11	31	19	7.618
<i>HOUSEHOLD SIZE</i>						
< 3 persons	20	8	24	24	24	
≥ 3 persons	19	1	32	26	23	19.227***
<i>EDUCATION</i>						
<High School	14	10	26	29	21	
High School	18	8	24	19	31	
>High School	26	1	28	27	18	47.609***

Table 3: Response Categories by DSG Characteristics (Continued)

	0	1	2	3	4 ^a	
	Percentages ^b					
Total	20	6	26	24	24	
Characteristics						Chi-Square ^c
<i>SCHOOL/TRAINING PROGRAM</i>						
No	20	7	25	26	22	
Yes	19	1	32	21	28	17.273***
<i>EMPLOYED</i>						
No	16	12	23	22	27	
Yes	22	2	28	26	22	45.325***
<i>PROPERTY OWNERSHIP</i>						
No	19	6	28	23	25	
Yes	23	5	22	28	21	6.002
<i>VEHICLE OWNERSHIP</i>						
No	18	7	27	23	25	
Yes	24	2	24	29	21	15.952***
<i>PREVIOUS FOOD STAMP APPLICATION</i>						
No	22	6	22	27	23	
Yes	14	5	37	18	27	24.001***
<i>AREA</i>						
Rural	7	9	27	23	34	
Small Town	12	4	24	35	24	
Medium-Sized Town	31	5	25	20	20	
Large City	20	6	28	24	23	43.792***

a. 0=Stigma; 1=Transportation/Health; 2=Agency-Related Problems; 3=Awareness; 4=Other

b. Percentages may not sum to 100 because of rounding.

c. (**) and (***) imply statistical significance at the 5 and 1 percent levels of probability, respectively.

Table 4: Estimated Coefficients from the Multinomial Logit Model

Variables	ln (P_1/P_0)	ln (P_2/P_0)	ln (P_3/P_0)	ln (P_4/P_0)
<i>CONSTANT</i>	0.9326 (1.8906) ^a	2.7677** (1.2244)	1.5385 (0.9739)	2.7091** (1.2288)
<i>AGE</i>	0.0084 (0.0231)	0.0281** (0.0143)	-0.0085 (0.0137)	0.0089 (0.0141)
<i>GENDER</i>	-0.1131 (0.4861)	-0.7514*** (0.2590)	-0.5079* (0.2567)	-0.8084*** (0.2688)
<i>MARRIED</i>	0.0730 (0.6758)	-0.2463 (0.3097)	-0.1068 (0.3025)	-0.0053 (0.3099)
<i>WIDOW/ER</i>	1.6279** (0.7757)	1.4905*** (0.5725)	0.3106 (0.5786)	0.9493* (0.5737)
<i>WHITE</i>	0.2586 (1.5841)	-3.9307*** (1.0151)	-0.2596 (0.6971)	-3.1545*** (1.0271)
<i>BLACK</i>	0.1835 (1.5253)	-3.1366*** (0.9900)	-0.3952 (0.6463)	-2.1338*** (1.0020)
<i>AGE 19-22</i>	-1.6380 (1.0415)	-0.5837 (0.3306)	-0.0513 (0.2918)	0.4207* (0.2865)
<i>AGE 23-30</i>	-0.7462 (0.5256)	0.0622 (0.2285)	-0.0924 (0.2329)	0.0589 (0.2217)
<i>AGE 31-59</i>	-0.5466 (0.5438)	0.2066 (0.2369)	-0.0600 (0.2416)	-0.2153 (0.2474)
<i>AGE ≥ 60</i>	-1.5117* (0.8094)	-1.2916*** (0.4333)	-0.3165 (0.3794)	-0.6372 (0.4049)
<i>HHSIZE</i>	-0.2672 (0.2573)	0.1849* (0.1021)	0.8557 (1.1026)	0.0186 (0.1099)
<i>HIGHSCH</i>	0.4760 (0.5279)	-0.0379 (0.3484)	-0.6377* (0.3306)	0.4923 (0.3473)
<i>INSCHOOL</i>	-2.1142* (1.1536)	0.9596*** (0.3147)	-0.2411 (0.3182)	0.3247 (0.3168)
<i>EMPLOYED</i>	-2.4546*** (0.5760)	-0.1967 (0.3085)	-0.0050 (0.3074)	-0.6144* (0.3034)
<i>PROPERTY</i>	-1.7369*** (0.5290)	-0.5615 (0.3139)	0.1772 (0.3076)	-0.6050* (0.3266)
<i>VEHICLE</i>	-0.9504 (0.6590)	-0.0283 (0.2779)	0.2204 (0.2737)	-0.0566 (0.2881)

Table 4: Estimated Coefficients from the Multinomial Logit Model (Continued)

Variables	ln (P_1/P_0)	ln (P_2/P_0)	ln (P_3/P_0)	ln (P_4/P_0)
<i>RURAL</i>	1.1284* (0.6632)	0.9954** (0.4794)	0.9742** (0.4748)	1.5259*** (0.4706)
<i>SMTOWN</i>	-0.1445 (0.6826)	0.3878 (0.3870)	0.7764** (0.3671)	0.5646 (0.3875)
<i>MSTOWN</i>	-0.0897 (0.5323)	-0.4063 (0.2916)	-0.7618*** (0.2935)	-0.4130 (0.2993)

a: standard errors are in parentheses.

(*), (**), and (***)) imply statistical significance at the 10, 5, and 1 percent levels of probability, respectively.

Log Likelihood = -987.63

Log Likelihood - Restricted = -1141.22

Model Chi-Square (76) = 307.18***

Table 4: Estimated Coefficients from the Multinomial Logit Model (Continued)

Variables	ln(P ₂ /P ₁)	ln(P ₃ /P ₁)	ln(P ₄ /P ₁)	ln(P ₃ /P ₂)	ln(P ₄ /P ₂)	ln(P ₄ /P ₃)
<i>CONSTANT</i>	1.8350 (1.9264)	0.6058 (1.8583)	1.7764 (1.9370)	-1.2292 (1.1249) ^a	-0.0586 (0.8520)	1.1706 (1.1267)
<i>AGE</i>	0.0197 (0.2223)	-0.0169 (0.0224)	0.0005 (0.0223)	-0.0364 (0.0132)	-0.0192 (0.0124)	0.0174 (0.0129)
<i>GENDER</i>	-0.6383 (0.4830)	-0.3949 (0.4828)	-0.6954 (0.4875)	0.2435 (0.2512)	-0.0571 (0.2588)	-0.3005 (0.2629)
<i>MARRIED</i>	-0.3193 0.6688	-0.1798 (0.6713)	-0.0783 (0.6685)	0.1395 (0.2890)	0.2410 (0.2899)	0.1015 (0.2899)
<i>WIDOW/ER</i>	-0.1375 (0.6953)	-1.3174* (0.7169)	-0.6787 (0.6971)	-1.1799** (0.4939)	-0.5412 (0.4509)	0.6387 (0.4956)
<i>WHITE</i>	-4.1893** (1.6893)	-0.5182 (1.5852)	-3.4131** (1.7022)	3.6711*** (0.9509)	0.7762 (0.6450)	-2.8950*** (0.9640)
<i>BLACK</i>	-3.3201** (1.6470)	-0.5787 (1.5305)	-2.3173 (1.6598)	2.7414*** (0.9308)	1.0027 (0.6140)	-1.7387* (0.9448)
<i>AGE 19-22</i>	1.0544 (1.0461)	1.5867 (1.0329)	2.0587** (1.0311)	0.5323* (0.2985)	1.0043*** (0.2847)	0.4720* (0.2477)
<i>AGE 23-30</i>	0.8084 (0.5222)	0.6538 (0.5246)	0.8051 (0.5189)	-0.1546 (0.2242)	-0.0033 (0.2112)	0.1513 (0.2179)
<i>AGE 31-59</i>	0.7532 (0.5326)	0.4866 (0.5368)	0.3313 (0.5349)	-0.2666 (0.2145)	-0.4219* (0.2178)	-0.1553 (0.2263)
<i>AGE ≥ 60</i>	0.2201 (0.8080)	1.1952 (0.7986)	0.8744 (0.7962)	0.9751** (0.4083)	0.6544* (0.3938)	-0.3208 (0.3811)
<i>HHSIZE</i>	0.4521 (0.2529)	0.3527 (0.2542)	0.2858 (0.2549)	-0.0993 (0.0927)	-0.1663* (0.0949)	-0.0670 (0.1004)
<i>HIGHSCH</i>	-0.5139 (0.4978)	-1.1137** (0.4999)	0.0163 (0.4999)	-0.5998** (0.3032)	0.5302* (0.3036)	1.1300*** (0.3007)

Table 4: Estimated Coefficients from the Multinomial Logit Model (Continued)

Variables	ln(P ₂ /P ₁)	ln(P ₃ /P ₁)	ln(P ₄ /P ₁)	ln(P ₃ /P ₂)	ln(P ₄ /P ₂)	ln(P ₄ /P ₃)
<i>INSCHOOL</i>	3.0737*** (1.1483)	2.0900* (1.1506)	2.4389** (1.1461)	-0.9837*** (0.2931)	-0.6349** (0.2800)	0.3488 (0.2918)
<i>EMPLOYED</i>	2.2529*** (0.5623)	2.4496*** (0.5685)	1.8401*** (0.5608)	0.1917 (0.2864)	-0.4178 (0.2694)	-0.6905** (0.2801)
<i>PROPERTY</i>	1.1754** (0.5038)	1.9141*** (0.5124)	1.1319** (0.5098)	0.7387*** (0.2887)	-0.0435 (0.2938)	-0.7822*** (0.3000)
<i>VEHICLE</i>	0.9221 (0.6500)	1.1707* (0.6518)	0.8938 (0.6482)	0.2486 (0.2618)	-0.0283 (0.2677)	-0.2770 (0.2685)
<i>RURAL</i>	-0.1330 (0.5725)	-1.1543 (0.5774)	0.3975 (0.5657)	-0.0212 (0.3512)	0.5305 (0.3291)	0.5518 (0.3415)
<i>SMTOWN</i>	0.5323 (0.6441)	0.9209 (0.6448)	0.7091 (0.6477)	0.3886 (0.3138)	0.1768 (0.3323)	-0.2119 (0.3162)
<i>MSTOWN</i>	-0.3166 (0.5273)	-0.6721 (0.5372)	-0.3233 (0.5324)	-0.3555 (0.2916)	-0.0067 (0.3032)	1.3488 (0.9448)

a: standard errors are in parentheses.

(*), (**), and (***)) imply statistical significance at the 10, 5, and 1 percent levels of probability, respectively.

Log Likelihood = -987.63

Log Likelihood - Restricted = -1141.22

Model Chi-Square (76)=307.18***

Table 5: Marginal Effects from the Multinomial Logit Model for the Five-Response Categories

Variables	Stigma	Trans/Health	Agency	Awareness	Other
<i>CONSTANT</i>	-0.3583** (0.1520)	-0.0126 (0.1579)	0.2442 (0.1716)	-0.0884 (0.1738)	0.2151 (0.1652)
<i>AGE</i>	-0.0015 (0.0019)	0.0000 (0.0007)	0.0055*** (0.0021)	-0.0043** (0.0021)	0.0003 (0.0020)
<i>GENDER</i>	0.1051*** (0.0358)	0.0059 (0.0456)	-0.0552 (0.0428)	0.0109 (0.0423)	-0.0666 (0.0437)
<i>MARRIED</i>	0.0184 (0.0400)	0.0023 (0.0116)	-0.0410 (0.0474)	-0.0029 (0.0461)	0.0232 (0.0457)
<i>WIDOW/ER</i>	-0.1444* (0.0779)	0.0118 (0.0637)	0.2005** (0.0796)	-0.1180 (0.0833)	0.0501 (0.0767)
<i>WHITE</i>	0.3726*** (0.1290)	0.0297 (0.1603)	-0.5406*** (0.1464)	0.4486*** (0.1459)	-0.3103* (0.1429)
<i>BLACK</i>	0.2881* (0.1212)	0.0227 (0.1237)	-0.4445*** (0.1398)	0.2951** (0.1403)	-0.1615 (0.1362)
<i>AGE 19-22</i>	0.0166 (0.0401)	-0.0209 (0.0176)	-0.1353*** (0.0515)	0.0094 (0.0430)	0.1302*** (0.0396)
<i>AGE 23-30</i>	0.0005 (0.0293)	-0.0100 (0.0068)	0.0176 (0.0355)	-0.0239 (0.0361)	0.0158 (0.0328)
<i>AGE 31-59</i>	0.0043 (0.0318)	-0.0071 (0.0075)	0.0623* (0.0346)	-0.0100 (0.0356)	-0.0495 (0.0356)
<i>AGE ≥ 60</i>	0.1187** (0.5454)	-0.0120 (0.0538)	-0.1829*** (0.0699)	0.0807 (0.0623)	-0.0045 (0.0615)
<i>HHSIZE</i>	-0.0142 (0.0139)	-0.0046 (0.0065)	0.0301** (0.0150)	0.0030 (0.0155)	-0.0143 (0.0160)
<i>HIGHSCH</i>	0.0091 (0.0455)	0.0070 (0.0068)	0.0025 (0.0504)	-0.1571*** (0.0477)	0.1385*** (0.0481)

Table 5: Marginal Effects from the Multinomial Logit Model for the Five-Response Categories (Continued)

Variables	Stigma	Trans/Health	Agency	Awareness	Other
<i>INSCHOOL</i>	-0.0593 (0.0423)	-0.0326 (0.0225)	0.1770*** 0.0475	-0.0888 (0.0481)	0.0038 (0.0455)
<i>EMPLOYED</i>	0.0470 (0.0404)	-0.0297 (0.0246)	0.0133 (0.0458)	0.0640 (0.0462)	-0.0946** (0.0430)
<i>PROPERTY</i>	0.0545 (0.0415)	-0.0196 (0.0260)	-0.0755 (0.0474)	0.1228*** (0.0467)	-0.0823 (0.0481)
<i>VEHICLE</i>	-0.0045 (0.0361)	-0.0131 (0.0082)	-0.0141 (0.0428)	0.0524 (0.0419)	-0.0206 (0.0428)
<i>RURAL</i>	-0.1795*** (0.0666)	0.0026 (0.0782)	0.0159 (0.0620)	0.0099 (0.0620)	0.1511*** (0.0584)
<i>SMTOWN</i>	-0.0872* (0.0523)	-0.0081 (0.0381)	-0.0183 (0.0550)	0.0855* (0.0506)	0.0281 (0.0535)
<i>MSTOWN</i>	0.0805** (0.0389)	0.0045 (0.0352)	0.0039 (0.0478)	-0.0908* (0.0489)	0.0019 (0.0476)

(*), (**), and (***) imply statistical significance at the 10, 5, and 1 percent levels of probability, respectively.

APPENDIX B:
SURVEY INSTRUMENT

STATEWIDE SURVEY OF ELIGIBLE NONPARTICIPANTS IN THE FOOD STAMP PROGRAM

THIS IS THE INTRODUCTION TO THE PERSON WHO ANSWERS THE TELEPHONE

INTERVIEWER: Hello, my name is _____ and I am calling on behalf of the Agricultural Economics Program/Southern University. We are conducting a statewide study to find out why eligible households are not participating in the Food Stamp Program. Your household has been randomly selected for the study. With your cooperation and input, the U.S. government will be better able to monitor the effectiveness of the Food Stamp Program in serving low-income households. All the information you give me will be kept strictly confidential and used only for the purposes of this study. Your name will never be associated with your answers. Your cooperation is voluntary, and you may choose to end the interview at any time. Your continuing with this interview implies that you are consenting to do so.

1. Are you the head of the household? **SPEAKING** [continue]
[No] May I speak to a head of the household?
HOUSEHOLD HEAD COMES TO PHONE [repeat introduction]

2. Is anyone in your household currently receiving food stamps?
____ Yes [Thank the respondent for his or her help and end the interview]
____ No [continue]

3. Counting yourself, how many persons live in your household? [Please count *all* persons who usually live with you, including persons not related to you]. _____

INTERVIEWER: PLEASE CIRCLE HOUSEHOLD SIZE AND CORRESPONDING GROSS MONTHLY INCOME FROM RESPONSES TO QUESTIONS 3 AND 4.

Income Eligibility Criteria

Persons in Household	Gross Monthly Income Limits
1	\$ 839
2	1,123
3	1,407
4	1,690
5	1,974
6	2,258
7	2,542
8	2,826
Each additional person	+284

The next two questions are designed to determine whether your household is eligible to receive food stamps. Again your responses will be kept strictly confidential. Your name will never be associated with your answers.

4. What is your gross monthly household income? [Income for all persons from all sources other than government assistance] _____

IF GROSS MONTHLY INCOME IS ABOVE THE MAXIMUM FOR HOUSEHOLD SIZE, THEN SAY

Your gross monthly household income indicates that you would not likely be eligible to participate in the Food Stamp Program. This will end our survey. Thank you for your cooperation.

IF GROSS MONTHLY INCOME IS AT OR BELOW THE MAXIMUM FOR HOUSEHOLD SIZE, THEN SAY

5. Are you aware that you may be eligible to receive food stamps?
____ Yes [continue] ____ No
6. Why have you not applied for food stamp benefits?

INTERVIEWER: WRITE RESPONSES VERBATIM, THEN CIRCLE THE LETTER.

- A. DO NOT LIKE TO RELY ON GOVERNMENT OR CHARITY
- B. TOO MUCH PAPERWORK
- C. DO NOT WANT TO BE SEEN SHOPPING WITH FOOD STAMPS
- D. DO NOT WANT PEOPLE TO KNOW I NEED FINANCIAL ASSISTANCE
- E. NEVER GOT AROUND TO APPLYING
- F. SOMEONE TOLD ME NOT TO BOTHER
- G. PREVIOUS BAD EXPERIENCE WITH FOOD STAMP PROGRAM
- H. PREVIOUS BAD EXPERIENCE WITH OTHER GOVERNMENT PROGRAMS
- I. APPLICATION TOO PERSONAL

- J. DO NOT KNOW HOW OR WHERE TO APPLY
- K. BENEFITS TOO SMALL FOR EFFORT REQUIRED
- L. TRANSPORTATION PROBLEM
- M. HEALTH OR MOBILITY PROBLEM
- N. LANGUAGE OR LITERACY BARRIER
- O. SITUATION OR INCOME CHANGED
- P. PROBABLY NOT ELIGIBLE
- Q. DO NOT KNOW REASON

INTERVIEWER: ASK QUESTION 7 IF "PROBABLY NOT ELIGIBLE" IS CIRCLED.

7. Why do you think that your household is ineligible for food stamp benefits?
(RECORD VERBATIM)
-
-

8. Have you or anyone else in your household ever applied for food stamp benefits?
____Yes ____No

NEXT, I WOULD LIKE TO ASK A FEW QUESTIONS ABOUT YOU AND YOUR HOUSEHOLD.

9. What is your age? _____

INTERVIEWER: CHECK WITHOUT ASKING RESPONDENT

10. **GENDER:** _____ Male _____ Female

11. What is your marital status?
Single/Never married _____
Married _____
Widow/widower _____

12. What is your race/ethnicity?
Caucasian _____
Black/African American _____
Other (Specify) _____

13. Excluding yourself, how many persons in your household are
Less than 5 years of age? _____
5 - 12 years of age? _____
13 - 18 years of age? _____
19 - 22 years of age? _____
23 - 30 years of age? _____
31 - 59 years of age? _____
60 years of age or older? _____

14. What is the highest grade or level of school you completed?
Less than 12 years _____
High school graduate _____
GED _____
Vo. Tech. program _____
Less than 4 years of college _____
BS/BA degree _____
More than 4 years of college _____

15. Are you currently enrolled in any school or training programs? ____ Yes ____ No

16. Which of the following best describes where you live?
Rural Area _____
Small Town (population < 10,000) _____
Medium-Sized Town (population 10,000 - 50,000) _____
Large City (population > 50,000) _____

17. Are you currently employed, including self-employment? ____ Yes ____ No

18. Do you or anyone else in your household own a car, truck, van, or motorcycle valued at \$4,500 or above? ____ Yes ____ No

19. Do you or anyone else in your household own a house or other real estate?
____ Yes ____ No

THANK YOU VERY MUCH FOR TAKING THE TIME TO COMPLETE THIS INTERVIEW.

**An Analysis Of The Psycho-Sociological Impact
Of Electronic Benefits Transfer (EBT) Among
South Carolina's Rural Recipients**

Submitted
by

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United States Department of Agriculture
Food and Consumer Service

December – 1997

This investigation was conducted under Contract Number 59-3198-6-023 with the Food and Consumer Service, United States Department of Agriculture, under the authority of the Food Stamp Act of 1977, as amended. Any opinions, findings, conclusions or recommendations expressed in this publication are those of the authors and do not necessarily reflect the views of the U.S. Department of Agriculture.

ACKNOWLEDGMENTS

The researchers express their deepest gratitude to all individuals involved in the accomplishment of this investigation of The Electronic Benefits Transfer Program. A special note of thanks is extended to the following persons; Dr. Kilolo Kijakazi, Dr. Bernice Cockrell and Dr. Margaret Andrews of the Food and Consumer Service Division USDA, who served as project officers, Dr. Oscar P. Butler, Jr., the Executive Director of the 1890 Programs, and especially to Dr. James H. Walker, Jr., Senior Associate Research Director, for his professional support, cooperation and guidance in the implementation and facilitation of this research project. As ever, we are continually indebted to Mrs. Marguerite R. Howie, Professor Emeritus of Sociology at South Carolina State University, who served as our mentor through her many years of involvement with the 1890 Research Program in the sociological arena and for her never ending inspiration and encouragement she provided.

Most importantly, the researchers wish to express sincere appreciation to the many individuals and Department of Social Services (DSS) agency personnel who made generous contributions through their time, energy and hard work during the data collection phase of the project. Appreciation is extended to Mr. Chester Tomson, Director of the Orangeburg County DSS for assisting in the data collection. Moreover, we express thanks to the State Office of the South Carolina EBT, especially Mr. Paul Brawley, SCEBT Administrator and Ms. Gwen Prioleau, User Services Administrator for their cooperation throughout the research endeavor.

Also, sincere appreciation is extended to Dr. Chintainani Sahoo, Research Fellow and Director of the 1890 Research Statistical Laboratory and his staff for their assistance with the computer analysis of data. In addition, grateful appreciation is expressed to Ms. Angela M. Corbett, Program Information Coordinator for 1890 Research and Extension and her assistant, Mr. Vincent Heyward. Appreciation is extended to Ms. Kathy Wei Yang of the Geographic Information System (GIS) Lab and her assistants, Mrs. Angela Robinson and Mr. Leonard Gore.

Finally, the authors express their deepest appreciation for research support provided by the United States Department of Agriculture, Food and Consumer Service, under Agreement No. 59-3198-6-023. The opinions, findings, conclusions or recommendations expressed in this technical bulletin are solely those of the authors and do not necessarily reflect the views of the United States Department of Agriculture.

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ABSTRACT

To date, there is limited research on the impact of the Electronic Benefits Transfer (EBT) program relative to its clientele. The overall objective of this investigation was to examine the psycho-sociological impact of the Electronic Benefits Transfer in relationship to the programs' utilization by rural recipients in South Carolina. The specific objectives were: (1) to examine differentials among program participants in regards to several independent variables (age, race, sex, and educational attainment), (2) to determine the functional and/or dysfunctional levels of the EBT program and (3) to investigate levels of satisfaction among the program participants. To address the objectives and hypotheses of the study, the researchers collected data from a Purposive Sample of 424 households (using face-to-face interview techniques) currently participating in the EBT program. A survey instrument was constructed and pilot tested. The instrument consisted of several sections to assess the recipients' usage of and attitudes towards the EBT program.

The data were analyzed using both univariate (frequencies, cross-tabs Chi-square) and inferential statistical techniques (T-test and ANOVA). Some of the pertinent findings and conclusions are as follows: (1) The T-test results showed that race had a significant main effect on satisfaction and functionality with the EBT program; (2) whites were more satisfied with the EBT program, however, both groups had positive attitudes on all four scales; (3) statistically significant differences emerged in relationship to age and the four scales, older respondents held a more positive attitude towards EBT; and (4) findings indicate that the EBT program is a viable entity in rural South Carolina.

INTRODUCTION

Poverty has always been a grave problem in America, which more often than not, traps families in dependency even today, despite the billions of dollars spent on its elimination. According to the Census report in 1993, more than 36.9 million persons (14.5 percent) in the United States were below the poverty level. Of this figure, 7.7 million families or 11.6 percent of all families were classified as being below the poverty level. A further examination of the structure of poverty in America showed that of white families, the poverty rate was 8.9 percent compared to 29.3 percent for Hispanic families and 30.9 percent for black families.

In South Carolina, children and the elderly are the age groups most seriously affected by poverty. According to THE KIDS COUNT report for 1995, "in 1991, 22.6 percent of children within the age group 0-5 and 20.2 percent of children in ages 6-17 lived in poverty; 20.5 percent of persons in ages 65 and older lived in poverty. Historically, the poverty rate for the elderly was much higher. However, during the past two decades, federal policy actions have substantially improved the economic status of the elderly but have not done so for children."

Single-parent (female headed) families are the most at risk of being in poverty. In 1989, more than 50 percent of children in single-parent families lived in poverty, by contrast, only 9.3 percent of children in married-couple families were poor. Children in single-parent families comprised up to 67.0 percent of all children in South Carolina who were living in poverty. Several contributing factors to the significant increases in the poverty rate as stated by J. Ross Eshleman (1994), are the recessions of the early 1980's and again at the beginning of the 1990's; increases in female-headed families; large family size;

minority-group status; age (children, youth, aged); unemployment and underemployment and lack of income from sources other than wages and low wages. It is clear that poverty is on the rise as a result of the increases in the number of single parent (especially among teenagers) and female-headed households that have exacerbated the predicament of poverty tremendously.

As President Johnson stated in his State of the Union address of 1964, “Unfortunately, many Americans live on the outskirts of hope--some because of their poverty, and some because of their color, and all too many because of both. Our task is to help replace their despair with opportunity. This administration today, here and now, declares ***unconditional war on poverty*** in America. I urge this Congress and all Americans to join with me in that effort.” The Economic Opportunity Act, the Vocational Education Act, the Manpower Development and Training Act and the Elementary and Secondary Education Act were designed to train, educate and provide employment opportunities for youth. Moreover, the Food Stamps Act was enacted in 1964 as a major tool of President Johnson’s war on poverty. This Act allowed persons of low incomes to purchase food at subsidized prices. Not only did the program aid individuals of low-incomes, but members of the agricultural sector and related marketing industries, also.

Human service agencies began to emerge in conjunction with the passage of the various aforementioned acts. Their goals were to help alleviate poverty. Human service agencies provided a variety of services because the clientele they served were a diverse group of individuals with various problems. Human service can be defined as a field that helps individuals cope with problems of social welfare, psychological, behavioral, or legal nature (Hasenfield and English, 1978). However, a more functional definition of human service is articulated by Peter Rossi (1978: 591). He defines human service as those services that depend on direct interpersonal contact between the deliverer and the

client. These program services are designed to reach a wide range of individuals with different problems and needs that meet specific agency eligibility guidelines. Rossi later elaborates on his theoretical concept of service delivery to mean “procedures and organizational arrangements actually employed to deliver services to appropriate targets” (1982: 124).

Some human services provide financial assistance to the poor, while other service programs aid individuals by educating and/or training them for paid employment and/or finding them jobs. Human service responsibilities are threefold: first, to prevent the development of problems which will handicap people; second, to help people solve their problems; and third, to prevent people from succumbing to the difficulties which threaten to overwhelm them (Collins, 1973: 128).

One of the greatest attributes of human service agencies is the service delivery. The essential premise of human service agencies is that there are deficiencies in our social structure that can be corrected through encounters or that there are naturally occurring processes accompanying human development that can be accelerated or made more efficient with the use of human service delivery (Rossi, 1978). Effective service delivery plays a vital role in the functioning of an agency’s services as well as to their clientele.

From a sociological theoretical perspective, functionalism is viewed as an approach or orientation to studying social or cultural phenomena. The theory holds that society is essentially a set of interrelated parts that have functions that result in the stability of the whole. According to Ian Robinson in 1987, the functional perspective draws its original inspiration from the works of Herbert Spencer and Emile Durkheim.

Spencer (1958), in his sociological theory, compares societies to living organisms. He stated, “any organism has structure—that is, a set of interrelated

components or parts as analogous to the human body, such as a head, limbs, a heart and so on. Further, each of these parts has a function—that is, a positive consequence for the whole system” (p. 394). As is in the body, it is held that if one part of the system changes it affects the other parts and how they operate or function. It also affects how the total system performs.

Robinson further states that “functionalism in modern American sociology is associated particularly with the work of Talcott Parsons (1951) and has subsequently been much refined and modified by his student Robert Merton (1968). How does one determine what the functions of a given element/part in the system are? Essentially, sociologists ask what its consequences are—not what its purposes are believed to be. They do this because a component can have functions other than those that were intended. Merton (1968) distinguishes between the manifest functions and a latent function (a consequence that is unrecognized and/or unintended). For example, the welfare system has the manifest function of preventing the poor from starving, but it also has the latent function of averting the civil disorder or uprising that might result if millions of people had no source of income” (p.18).

Merton continues to point out that, not all features of the social system are functional at all times. On occasion some elements can have a dysfunction (a negative consequence that may disrupt the social system). “A prime example is industry in America. It is functional, in that, it provides the goods and services on which much of our way of life depends. However, it is also dysfunctional inasmuch as it seriously pollutes the environment.” Functions are to be viewed as social procedures which help maintain the system” (Merton, 1957:21). A chief caution to the functional approach is the temptation of dismissing disruptive changes as dysfunctional, even if those changes are necessary and beneficial in the long run.

In 1977, the Food Stamp Act of that year changed to help all eligible participants to obtain a more nutritious diet through normal channels of trade by increasing their food purchasing power via food stamp coupons. For almost two decades the use of coupons became institutionalized in America.

Today, more than 27 million Americans in 11 million households receive help with putting food on their tables every day. A serious psycho-sociological negative consequence of the coupon system seemed to have emerged over the years--the stigma attached to coupon usage. As new technologies evolved (computers, cellular phones, Automatic Teller Machines, etc.), new methods of providing financial benefits to those in need are evolving also. Within the past decade, the United States Department of Agriculture has experimented with Electronic Benefit Transfers (EBT) projects as a mechanism for enhancing the delivery of food stamp benefits.

Drawing on the concept of functionalism for the macro-sociological system to a micro-sociological one (Electronic Benefit Transfer Program), the researchers examined EBT from a functional perspective. Thus, the research question became how functional or dysfunctional was EBT relative to the recipients? The researchers hypothesized that—any major change to the micro-sociological system such as converting from coupons to that of EBT would result in some level(s) of dysfunction among the clientele.

Moreover, from the recipients perspective, how disruptive and/or what negative consequences arose from the change, if any? What were some of the psycho-sociological effects and what coping mechanism or skills were developed by the program participants relative to EBT? What impact with regards to self-esteem (reduction in the stigma attached to food stamp usage) and the quality of life did the conversion to EBT have on the recipients? What deviant behavior pattern(s) if any, arose from the conversion to the EBT system (i.e., attitudes and

perceptions towards either increases or decreases in food stamp fraud and/or card misuse)?

Such lines of inquiry took on special importance during periods of major change within the system, especially the food stamp program, given the magnitude of individuals affected. While the use of social indicators for purposes of sociological inquiry is not new, however, it was paramount that a documented assessment utilizing empirical techniques to investigate the EBT program usage would provide new and timely data, particularly from the participants' perspective.

BACKGROUND INFORMATION

Many Americans have utilized as well as abused the food stamp system. For years, the food stamp coupon had been the sole means utilized by individuals at authorized retailers to redeem food. Food stamp coupons were a direct and inexpensive way of ensuring that the benefits were used to purchase food. However, over the years, advocates found that the food stamp coupon system limited the purchasing choices of participants, placed a stigma on those who participated and there was a tendency to trade and/or sell the coupons to unauthorized participants.

In an effort to effectively serve the necessary recipients and limit or eliminate food stamp abuse, the implementation of the Electronic Benefits Transfer (EBT) Card appeared to be the most beneficial method to date. EBT reduces problems because the benefits are electronically delivered/credited to authorized banks or food retailers. Paper based transfers are used for about 60 percent of more than \$400 billion in federal benefits whereas state benefits of \$95 billion account for almost 100 percent of paper transfers (Humphrey, 1996).

An examination of related literature has indicated that several projects and reports would be helpful towards the investigation of the Electronic Benefits Transfer (EBT) Program. However, none of the reviewed literature focused on the recipients and their perceptions, behavior, attitudes or satisfaction toward the EBT Program.

One government document discussed the issues of the use of paper voucher versus plastic in regards to food stamp benefits. Individuals testified about the abuse of food stamps and the future of delivering food assistance benefits through the EBT system (House of Representatives, 1992).

A second report provided testimonies regarding fraud that occurs in the food stamp and WIC programs. The Senate Agriculture Committee was urged to emphasize how important EBT is to the food stamp program. The 1990 Farm Bill contained provisions to encourage states to utilize delivery of the food stamp programs through EBT.

EBT has the potential to reduce fraud (Senate, 1994). Another hearing was held and the Agriculture Committee heard witnesses who were interested in the Food Stamp Program and the use of an Electronic Benefits Transfer System as an alternative means to issue food stamp benefits. They, also, mentioned the use of food stamps to purchase food that may not contribute to a nutritionally adequate diet (House of Representatives, 1995).

Articles, papers and presentations were, also, reviewed relative to the subject area. For instance, Fraker, Martini and Ohls (1995) assessed the findings of four demonstration projects to look at the effect on household food expenditures of converting food stamps into a cash transfer system. Blank and Ruggles (1996) investigated the relationship between eligibility and participation in the Aid to Families with Dependent Children (AFDC) and Food Stamp programs.

It was interesting to find that a substantial number of women exited the programs before their eligibility ended. Hoynes (1996) examined the effect of cash transfers and food stamp benefits on family labor supply and welfare participation among two-parent families. A model was developed to examine the income levels of limited resource individuals and families to determine how a working family would achieve a level of self-sufficiency. The results suggested that labor supply and welfare participation among two-parent families is highly responsive to changes in the benefit structure.

However, the aforementioned review of related research, completed and ongoing, does not focus on the EBT recipients or individuals. The previous focus of articles and papers on EBT has been economic or cost reduction based (e.g., cost analysis, cost benefit, fraud elimination or reduction related to the Food Stamp Program, etc.).

EBT is presently being utilized in South Carolina as well as other states. The South Carolina Electronic Benefits Transfer project (SCEBT) for food stamp conversion began pilot programs in Darlington County on November 1, 1994. Expansion to statewide operations began on March 1, 1995 and was completed in December 1995.

According to the South Carolina Department of Social Services, as of April 1996 (the latest available figures) there were 140,000 recipients participating in the food stamp EBT Program statewide. Monthly benefits average 25 million dollars with an average EBT transaction of around \$25.00. As of April 1996, there were 3,095 retailers participating and over one million EBT transactions were processed per month (South Carolina EBT, 1996).

To obtain an EBT Card, the food stamp recipients go through the regular process of completing the necessary forms. Eligibility is determined, an account is established in the recipient's name and food stamp benefits are provided each month electronically into the recipient's account. The recipient is responsible for selecting their Personal Identification Number (PIN). Without the PIN, the EBT account cannot be accessed.

Prior to the card's utilization, the participants were required to attend training sessions on the EBT card usage. Both multimedia and individualized instructions were given to the program participants. Also, the South Carolina Department of Social Services established a toll free help-line where participants

that had difficulty in using the EBT card or any others associated with the program could receive help without returning to the local DSS office.

By using the EBT Card, paper food stamp vouchers are becoming obsolete across the nation. The United States reform law passed in 1996 demands that all 50 states must have EBT in place for food stamps by the year 2002 (The Economist, 1997).

The EBT study has relevance because it focused on the recipient's perspective of card usage. The researchers approached the issue of EBT by examining the recipient's perceptions, attitudes and the impact on their quality of life. Hopefully, the decision to utilize the EBT system will prove to enhance the delivery of food stamp benefits as well as give the user a higher value of self-esteem. It is anticipated that, this documented analysis from the recipient's perspective utilizing psycho-sociological research techniques to examine the impact of the EBT program will provide new and efficacious data to the Food and Consumer Service Division of USDA, policymakers at both the state and federal levels, as well as the general public.

OBJECTIVES AND HYPOTHESES

The primary purpose of this study was to examine the psycho-sociological impact of the Electronic Benefit Transfer Program (EBT) relative to its utilization by the program participants. The specific objectives are threefold:

Specific Objectives

1. To examine differentials among program participants in regards to several independent variables (e.g., age, race, sex and educational attainment) on the usage of and attitudes toward the Electronic Benefits Transfer (EBT) Program in rural South Carolina.
2. To determine the functional/dysfunctional levels of the Electronic Benefits Transfer Program relative to the participants' quality of life or well being.
3. To examine the levels of satisfaction among the program participants relative to the expected benefits of the Electronic Benefits Transfer Program.

Hypotheses

1. The quality of life among rural EBT program participants would increase significantly from that of the Food Stamp Coupon usage.
2. There is a direct correlation between the EBT participants level of satisfaction with the Food Stamp Program and the EBT card usage.
3. A significant relationship would exist between actual and perceived usage of the EBT card.

Limitations

This study was limited to rural Electronic Benefits Transfer participants in South Carolina.

METHODOLOGY

Data for this cross-sectional investigation were collected from a Purposive Sample of 500 selected households currently participating in the EBT program in Orangeburg County (the target county) utilizing face-to-face structured interviews (See Appendix A). As of April 1997, latest available figure, 6,762 recipients participated in the EBT program in Orangeburg County.

A sample population of 500 interviews yielded a ± 3 percent error rate at the 95 percent confidence level. The researcher obtained a listing of all EBT participants in the target county and stratify or array the list wherein certain variables or characteristics of each identifiable group (e.g., single parent, age, race, sex, family size and education) of participants were represented. A purposive sampling design was utilized to select the primary sampling units based on the previously mentioned indicators.

Prior to data collection, operational definitions of key concepts and/or endogenous variables were formulated and the instrument constructed to examine the previously stated objectives of the research problem. The development of the survey instrument encompassed several sections. The first section consisted of demographic information. The remaining sections were formulated using Likert-type items to measure dimensions of the respondent's attitudes, perceptions and food security with regards to EBT and their quality of life.

Preceding the administration of the face-to-face structured interviews to the participants, the researchers trained paraprofessionals on interview techniques and methodology (See Appendix B). A pilot-test was conducted to refine the instrument (e.g., to examine semantics, item flow, timeframe, etc.).

Data analysis consisted of both descriptive and inferential statistical techniques. Frequencies and percentage distributions were utilized to obtain a

synopsis of the significant response patterns for various items relating to EBT. Independent T-test and Multivariate Analysis of Variance techniques were used to determine the extent the variables differ in terms of mean scores and to test for linear modeling and/or regressions. Data were analyzed by the 1890 Statistical and Data Management Laboratory here at the university.

Profile Of The Research Situs

Orangeburg County is located near the geographical center of South Carolina. The nearest urban area is the capital city of Columbia, 42 miles due west of the city of Orangeburg (the county seat), which is centrally located within the county. The seaport city of Charleston is 75 miles to the east. The county is approximately 70 miles long and thirty-five miles wide at its farthest points (See Research Situs-Figure 1 below).

Research Situs



Orangeburg County has a population of 84,803 according to the 1990 Census of Population and Housing. Of the total population for the county, 58.01 percent are Black with less than one percent being other and 46.31 percent are males. The per capital income for the county is \$9,004 with a median household income being \$20,216. The poverty index for the county in 1996 revealed that almost one-fourth or 24.9 percent of the population were below the poverty level. The percent below poverty level for female headed households is a staggering 47.7 percent, while the rate for female headed households with children under 18 years is even greater at 58.1 percent.

Seventy percent of the county is classified as rural (no town with an incorporated population greater than 15,000 persons), with an educational attainment level of high school graduate rate of 62.4 percent. A more disturbing demographic note, is that, almost one fifth of the adult population has less than a ninth grade level of educational attainment.

In order to obtain a clearer profile of the county relative to the Food Stamp Program, several other factors are presented. There are 32,340 housing units with the majority (58.7 percent) being built prior to 1970. Less than half of these units were classified as owner-occupied housing units. Of all housing units, more than 1,600 housing units lack either complete plumbing or kitchen facilities. More alarming is the fact that 2,232 units still use wood as the primary method for heating and cooking.

Of persons 16 years and older, 41.4 percent were in the labor force and the county had an unemployment rate of 8.6 percent. However, the unemployment rates stood at double-digit figures at 12.9 percent. The majority of the labor force that commuted to work drove their own vehicle (70.4 percent), 22.5 percent carpooled and less than one percent used public transportation.

A note of clarification, only one town within the county had public transportation prior to the study and this experimentation effort failed. Thus to date, no public transportation is available. The county had a total number of households of 28,852 with 5,456 being headed by females.

The Sample Disposition

In this investigation of the Electronic Benefits Transfer Program, in accordance to the sample design previously mentioned, more than 500 households of program participants provided by the Department of Social Services that had signed consent/release forms (See Appendix C) were contacted. Respondents were asked to provide information through a series of items on the surveys concerning EBT in relationship to perceptions and beliefs; their knowledge of the EBT card and the usage of such in terms of his/her personal experiences or the lack of these experiences.

Prior to the collection of data, letters were sent to the sheriff in the target county informing his office that this was a valid investigation sponsored by the United States Department of Agriculture (See Appendix D). In the summer of 1997, a pilot-sample of 50 individuals and 500 households were selected to participate in this research study, respectively.

Table 1
Sample and Pilot-Sample Disposition

Sample	Number	Percent
Completed Interviews	374	74.8
Not completed	41	8.2
Refused	85	17.0
Total	500	100
Pilot-Sample	Number	Percent
Completed Interviews	50	100

The results of the interviews are shown in Table 1. Of the 500 persons contacted, 374 or 74.8 percent of the surveys were completed. However, the pilot-sample was aggregated into the data set resulting in a total of 424 interviews (84.8 percent). As with any questionnaire or survey, the respondents were informed that they had the option to refuse to answer any items or respond not applicable.

Several individuals commenced the interview, however, for numerous reasons they did not complete the face-to-face survey. Moreover, many did not respond to several key items of the survey relative to such variables as income, current value of their homes or dwellings, and were not fully aware of some timeframes of certain events, etc.

Many respondents that refused were fearful that their benefits would be affected by participating even though we assured them that this would not take place and that confidentiality would be maintained. Of the respondents in the pilot-sample, there were no refusals in as much as they agreed to the interview format through prior contact via the DSS Office.

Also, the pilot-sample offered the opportunity for recently certified respondents to participate. Moreover, the Pilot-sample had a replacement factor included when time restraints or other reasons became a factor. Therefore, we were able to complete all fifty interviews or a 100 percent completion rate.

A significant note relative to the sample and may be a statistical artifact is that the target county has a large college population. There are two four-year institutions with a combined student population of slightly more than five thousand. Given the fact that many of these students live off campus and are eligible or qualify for food assistance. However, we were not provided a listing to identify such.

DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLES

An examination of the demographic data collected from 424 individuals revealed the following. Of this sample, as revealed in Table 2, 14.0 percent of the respondents were males and 86.0 percent were females. In the pilot-sample, the percentages were nearly identical to that of the sample, with 10.0 percent males and 90.0 percent females.

In regards to race, 66.7 percent of the sample were Black and 33.3 percent White. However, the sub-sample differed in that 84.0 percent were Black and 16.0 percent were White. One note of interest found in both samples is the lack of the racial classification of other groups such as Asian or Latin. This factor may have been another artifact of the sample design in that the Purposive Sampling technique was utilized.

Another variable of both samples that produced nearly identical data was the poverty levels. The researchers utilized the poverty index as one of the dependent variables for analysis. A concise definition for poverty is very difficult when it is relative to a given time or place. However, poverty exists "when the resources of families or individuals are inadequate to provide a socially acceptable standard of living" (Johnson, 1966:183). If one uses this definition, then one is poor when that individual does not obtain the standard of living.

Table 2. Demographic Characteristics

	Sample [N=374]	Pilot-Sample [N=50]
GENDER	Percent	Percent
Male	14.0	10.0
Female	86.0	90.0
RACE		
Black	66.7	84.0
White	33.3	16.0
POVERTY LEVEL		
Above	13.0	18.0
Below	87.0	82.0
AGE		
Under 25 years	12.8	14.0
25 to 34 years	21.5	50.0
35 to 44 years	33.7	26.0
45 to 54 years	26.7	10.0
55 to 64 years	5.9	---
Average Age	38.5	31
Education		
0 through 8th Grade	7.6	12.0
9 through 11th Grade	10.6	20.0
High School Grad	68.9	50.0
Some College	12.9	18.0
Marital Status		
Married	28.7	18.0
Divorced	7.6	16.0
Separated	22.8	14.0
Widowed	4.7	2.0
Single	36.3	50.0
Employment Status		
Employed	49.8	20.0
Unemployed	50.2	80.0
Occupation		
Professional/Technical	---	2.0
Manger/Administrator	---	---
Clerical/Sales	7.5	26.0
Craftsmen/Skilled Worker	23.9	14.0
Operative/Kindred Worker	35.7	42.0
Unskilled/Laborer	33.4	16.0
Farm Worker	---	---

For this study, we employed the method developed by Orshansky and utilized by the Social Security Administration in 1965. This method of classification was revised in 1969 and again in 1980. It is based on a food budget estimated as an "economy food plan for emergency use." The level is set at three times the amount of the total food budget and is adjusted for family income and the number of persons within the household dependent on the income as their sole means of support.

Each year the poverty index is published as a guideline for federal, state and some local agencies in order to provide help to those individuals and families in need of assistance. The researchers used the poverty index relative to the income variable to classify the respondents into above and below poverty categories for analyses. As shown in Table 2, the demographic characteristics revealed that more than four-fifths of both samples are below the poverty level at 87.0 percent of the sample and 82.0 percent of the pilot-sample. However, this is a sampling constraint inasmuch as the nature of the clientele served by the EBT Program entail a majority of the sample being in below the poverty level.

The respondents were asked to list their age at the time of the survey and the researchers aggregated the ages into five categories: Under 25 years, 25 to 34, 35 to 44, 45 to 54, and 55 to 64. This procedure allowed for a more concise comparison of the data by age levels (e.g., young adults, middle, older working, and elderly working). Again, as expected, the sample and the pilot-sample differed very little in regards to the age variable. The average age for the sample and pilot-samples were 38.5 years and 31 years, respectively.

With regards to marital status, the sample revealed that less than one-third of the respondents were married (28.7 percent), while the pilot-sample respondents were slightly less at 18.0 percent being married. The sub-sample had almost one-third of its respondents being divorced/separated (30.4 percent)

and 36.3 percent was single. When the researchers aggregated these groups, more than two-thirds (66.4 percent) of the both samples were living single. Again, this variable is similar to the gender wherein it is a sampling constraint or statistical artifact given the nature of the sample population.

In regards to employment, both samples had high unemployment rates at 50.2 percent for the sample and 80.0 percent for the sub-sample. The occupation variable produced the following frightful statistic, the majority (92.5 percent) of the respondents in the sample were in the following aggregated categories: operative, unskilled, and labor groups. These occupations tend to produce low wages or are low-paying positions with limited opportunity for advancement.

These results correlated with that of the poverty level variable, which was comparatively high, also. That is, many of the respondents are in occupations where the wages are indicative to that of “the working poor.” Traditionally, South Carolina has been a low wage state, mainly due to the dominance of the type of industries (textile, garment, tourist trade, etc.) and its agricultural base. The occupation findings parallel those of John Moland which reflect that blacks are over-represented in menial service jobs. “Black employment in low-paying service positions is more pronounced in the non-metro South” (1981: 479).

Not shown in Table 2, with regards to residence, 50.2 percent of the respondents were renting, 8.8 percent were buying their homes, 40.4 percent own their residents and .6 percent listed other (in most cases they were living rent free). The respondents were asked the approximate value of their residence. The range for this item was from \$13,000 to \$47,000, with the mean value being \$18,000.

The respondents were asked to describe the type of dwelling with regards to the structure. Of the residence identified, 46.2 percent of the residences were single dwelling units. The remaining units were as follows: duplex (two units

combined) .6 percent, apartment 28.1 percent, mobile home (trailer) 19.3 percent, and 5.8 percent listed other. The respondents were asked to list the number of rooms within their dwelling (excluding bath). The mean number of rooms was 5.4.

The respondents were asked to rate the condition of their dwelling. They were given a range which resulted in the following: 47.0 percent stated that no repairs were needed; 44.0 percent of the dwellings needed only a few repairs (less than \$500.00); and 9.0 percent of the respondents reported major repairs needed (greater than \$1,000).

Another significant variable relative to the respondents was their present state of health. Almost half, 47.4 percent of the respondents reported excellent; 43.3 percent stated good; 8 percent fair and only 1.4 percent reported their health as poor.

DATA ANALYSIS AND INTERPRETATION

Research Hypotheses

The researchers hypothesized that the quality of life of EBT recipients in rural areas would increase significantly from prior coupon usage. Moreover, we expected that their level of functioning and satisfaction relative to the EBT card system would increase also. Furthermore, the distinctive change from the coupon system and varying timeframes of implementation by retailers would pose structural constraints on the EBT card usage.

Measures

Dependent Variables: The researchers operationalized two variables for analyses with the independent variables: [1] Functional and/or dysfunctional levels of EBT card usage and [2] Levels of satisfaction. These variables were utilized to analyze the differences, if any, between the two dependent variables and their relationship to several independent variables.

Independent Variables: The independent variables consisted of the following: race, sex, age, education attainment level, marital status and occupation. Education level is operationalized as the highest grade completed at the time of the survey. Age was the actual number of years and recorded into one of the six categories aggregated by the researchers. Gender, race and employment status were coded as dichotomous variables and were treated as such, while the remaining variables are continuous.

Descriptive Analysis

Given the magnitude of the research on the EBT program, it became practically impossible to investigate all variables associated with its usage. Therefore, this study focused on several factors relative to the rural recipients and their relationship to the impact of the EBT card.

Our first step in the analysis of the data sets entailed the utilization of descriptive techniques or statistics to demonstrate the impact of the EBT card. Descriptive statistics were used as the first phase of the data summarization and the second phase in making general statements on the basis of the summary data. An important goal is the description of the data in as clear and simple form as possible (Lin, 1976).

The descriptive analysis reported in the following section essentially compares the data set by rural and urban areas. Also, Content Analysis was utilized on the open-end items of the questionnaire with notable comments or direct quotes analyzed.

Several statistically significant items relevant to the utilization of the EBT card and its impact on rural clientele are listed in the following data descriptive results. When the respondents were asked—"Is the EBT system better now?"

Table 3. EBT Better Now

ITEM	RESPONSE	PERCENT
	Strongly Agree	67.3
	Agree	28.1
	Uncertain	3.5
	Disagree	1.2
When DSS changed to the Electronic Benefits Transfer System from the Food Stamp coupons, would you say that the system is better now?	Strongly Disagree	---

As shown in Table 3, a vast majority 67.3 percent strongly agreed and 28.1 percent agreed that the EBT system was better than the coupons. Only 1.2 percent of the respondents disagreed that the EBT system was better. The researchers anticipated that the change would cause problems and it would take a longitudinal effort on the part of the South Carolina Department of Social Services to implement the EBT system, especially in the rural counties.

Many of the respondents stated that they were very pleased with the change from the old coupon system and some said that they would like to see other assistance benefits do likewise (e.g., welfare checks, child support checks, etc.). Almost all of the respondents felt that it is a better and a more secure system than the previous coupon system.

Table 4. Life Situation

ITEM	RESPONSE	PERCENT
Is your life situation better today using the EBT card than when you used the food coupons?	Strongly Agree	60.8
	Agree	35.1
	Uncertain	3.5
	Disagree	.6
	Strongly Disagree	---

Another key item asked of the respondents as depicted in Table 4 was—"Is your life situation better today using the EBT card than the coupons?" Again, the respondents overwhelmingly felt that their life situation was better today by using the EBT card.

Slightly more than sixty percent (60.8 percent) strongly agreed and 35.1 percent agreed that their lives were better since using the EBT card. When the two are combined, the percent of those agreeing is 95.9 percent. Of the remaining respondents, 3.5 percent were uncertain and .6 percent disagreed that their life situation was not better.

Several respondents reported, "they felt more secure using the card than when they had coupons." The respondents perceived the card to be a lot less likely to be stolen or lost. One individual stated that, "Over the years, my coupons were taken out of my mail box five or six times and trying to get them replaced at the Department of Social Services Office was total hell."

Table 5. Using EBT Card

ITEM	RESPONSE	PERCENT
I feel a lot better using the EBT card than coupons.	Strongly Agree	62.0
	Agree	33.9
	Uncertain	2.9
	Disagree	1.2
	Strongly Disagree	----

Upon examining Table 5, responses to the variable—"I feel a lot better using the EBT card than the coupons" revealed that the aggregate percent of agree and strongly agree responses were identical to those in Table 4, with 95.9 percent of the respondents agreeing.

Table 6. Ashamed Using EBT Card

ITEM	RESPONSE	PERCENT
	Strongly Agree	63.2
	Agree	33.3
I don't feel ashamed using the EBT card.	Uncertain	2.3
	Disagree	1.2
	Strongly Disagree	----

In regards to the respondent's feelings about using the EBT card, they were asked—"I don't feel ashamed using the EBT card?" As shown in Table 6, of the individuals responding, 63.2 percent strongly agreed and 33.3 percent agreed. Only 1.2 percent disagreed. The overwhelming consensus in response to this variable showed they were not ashamed when using the card.

As several replied, "I feel as though I am like everyone else when they use their credit card." The sentiment being that in large supermarkets that has the integrated debit system (retailers that have one machine that handles both bankcard transactions and EBT transactions), there is less stigma when using the card. A significant note, at the timeframe of this study not all retailers had the integrated debit card system.

Table 7. Easier Shopping

ITEM	RESPONSE	PERCENT
	Strongly Agree	51.2
	Agree	42.9
Do you feel that EBT has made your grocery shopping easier?	Uncertain	4.1
	Disagree	1.8
	Strongly Disagree	---

In order to assess the respondents perception in regards to grocery shopping, as revealed in Table 7, again, more than ninety percent (94.1 percent) of the respondents felt that the EBT system had made shopping easier. Several respondents commented, "I even like going shopping now because I don't have to wait as long as when they (the cashiers) would count the coupons with in each booklet."

Table 8. Store Personnel

ITEM	RESPONSE	PERCENT
	Strongly Agree	45.3
	Agree	46.5
Do you feel the people working in the grocery stores are friendlier since you use the EBT card?	Uncertain	5.3
	Disagree	2.9
	Strongly Disagree	---

Table 8, presents the responses to the variable—"Do you feel that people working in the grocery stores are more friendlier since you use the EBT card?" Again, as with the response pattern similar to that of Table 7, more than ninety percent of the recipients felt that the stores personnel seem to treat them in a more friendlier manner with 45.3 percent strongly agreeing and 46.5 percent agreeing. As one respondent replied—"They don't seem as grouchy now. I don't know if it is the new system or not, but they do seem to be friendlier and more helpful."

Table 9. EBT Training Helpful

ITEM	RESPONSE	PERCENT
	Strongly Agree	48.8
	Agree	44.7
Do you feel that the EBT training that you received was helpful?	Uncertain	5.9
	Disagree	.6
	Strongly Disagree	---

Viewing the data in Table 9, on the training that the respondents received prior to issuance and utilization of the EBT card, nearly fifty percent (48.8 percent) strongly agreed and 44.7 percent agreed that the training was helpful. Only 5.9 percent of the recipients were uncertain.

Table 10. Adequate Training

ITEM	RESPONSE	PERCENT
Do you feel that the EBT training on how to use your EBT card was adequate (or enough)?	Strongly Agree	48.5
	Agree	43.8
	Uncertain	4.7
	Disagree	1.8
	Strongly Disagree	1.2

As previously mentioned, 92.3 percent of the respondents stated that training was helpful. The variable in Table 10, asked the respondents—Was the training you received on the EBT card adequate or enough? Similar to the responses produced previously on training, 48.5 percent strongly agreed and 43.8 percent agreed that the training was adequate.

Table 11. Using EBT Without Training

ITEM	RESPONSE	PERCENT
Do you feel that you could have used your EBT card without going through the training?	Strongly Agree	23.5
	Agree	25.9
	Uncertain	3.5
	Disagree	2.4
	Strongly Disagree	44.7

In order to assess the respondents' perception on their ability to use the EBT card without the training sessions, the researchers asked—"Do you feel that you could have used the card without training?" When the researchers aggregated both the agreeing and those disagreeing, there was almost a fifty-fifty split. Surprisingly, 49.4 percent of the respondents stated that they could have used the EBT card without the training. However, almost fifty percent (47.1 percent) said that they could not. Of the remaining respondents, 3.5 percent were uncertain.

Table 12. Problems Using EBT Card

ITEM	RESPONSE	PERCENT
When I first got the EBT card I had a lot of problems when I tried to use my card?	Strongly Agree	45.9
	Agree	44.1
	Uncertain	5.3
	Disagree	3.5
	Strongly Disagree	1.2

Shown in Table 12 are the results to the variable when the researchers asked—"When you first got your EBT card, did you have problems when you tried to use it?" As reported in Table 11, 49.4 percent of the EBT recipients stated that they could have use the card without training. However, in Table 12, 90.0 percent of the respondents reported that they had problems when they first tried to use the card. Moreover, several of the respondents stated that many of the cashiers had problems when they were at the check-out counters.

Also, many of the retailers did not have the integrated electronic debit machine which caused some cashiers problem. Having to use different debit machines (one for purchasers that used their Automated Transaction Card and one for the EBT card) at the point of sales caused some minor problems for retailers.

Table 13. EBT Account

ITEM	RESPONSE	PERCENT
Do you feel that it is easy for you to keep up with your balance left in your EBT account?	Strongly Agree	49.4
	Agree	43.5
	Uncertain	5.9
	Disagree	1.2
	Strongly Disagree	---

As depicted in Table 13, only 1.2 percent of the respondents felt that it was not easy for them to keep up with their EBT account balance during the month. Of those respondents that either strongly agreed (49.4 percent) and agreed (43.5 percent), the majority stated that "It's a lot easier than trying to keep up with coupons."

However, several respondents reported that they had trouble remembering their personal identification number (PIN) when they made purchases or when inquiring about their EBT balances. Even though the survey did not address the problem, some of the respondents reported that they sometimes had to return

items because they did not have enough in their account when they made purchases, especially at or near the end of the month.

Table 14. EBT Help-line

ITEM	RESPONSE	PERCENT
Do you feel that the EBT Help-line was useful to you when inquiring about your balance?	Strongly Agree	53.5
	Agree	43.5
	Uncertain	2.9
	Disagree	---
	Strongly Disagree	---

The data in Table 14, shows the results from the variable assessing the respondents' feelings concerning the Department of Social Services (DSS) help-line and its usage. DSS has a toll free number wherein clients can telephone to inquire about their account balance and obtain other relevant information.

Only 2.9 percent of the respondents were uncertain about the help-line and the remainder of the respondents either strongly agreed (53.5 percent) or agreed (43.5 percent) that the line was helpful. Many of the recipients viewed the Department of Social Services help-line as a safety net or security blanket when the DSS offices were closed or on the weekends when their caseworker was not available to provide help or information they needed. Of the 2.9 percent that were uncertain about the utilization of the help-line, several of these individuals stated that they did not even try to use the service.

Table 15. EBT Use

ITEM	RESPONSE	PERCENT
	Strongly Agree	55.9
	Agree	39.4
When I use my EBT card I feel much better than when I was using the old Food Stamps coupons.	Uncertain	3.5
	Disagree	1.2
	Strongly Disagree	---

The data in Table 15 assessed the respondents' feelings concerning the use of the EBT card in relationship to using the old coupons. Of the recipients, 55.9 percent strongly agreed and 39.4 agreed that they felt much better using the EBT card than coupons.

Table 16. EBT Machine

ITEM	RESPONSE	PERCENT
	Strongly Agree	59.6
Do you feel that not enough stores had the EBT machine in your neighborhood?	Agree	33.3
	Uncertain	2.9
	Disagree	3.5
	Strongly Disagree	.6

The researchers wanted to examine the respondents' perception concerning the availability of the electronic debit machine. The results in Table 16 indicated that more than nine of ten respondents (92.9 percent) felt that there were not enough debit machines located in their neighborhoods. As one respondent stated "I had to go to the stores uptown to use my EBT card. Each time I had to pay someone to carry me." When first initiated, most local or neighborhood stores were not equipped with the debit machines.

As another recipient said, "For the amount of food stamps I get, it was almost not worth paying the people to take me to the stores." Another significant note, several respondents continued to refer to the EBT card as Food Stamps.

Table 17. EBT Card

ITEM	RESPONSE	PERCENT
Do you feel that all of the small neighborhood stores got EBT card machines in time for you to use them?	Strongly Agree	---
	Agree	2.9
	Uncertain	2.9
	Disagree	53.2
	Strongly Disagree	42.1

Table 17 depicts responses to the item—"Do you feel that all small neighborhood stores got EBT card machines in time for you to use them?" By far, a vast majority of the respondents either strongly disagreed or disagreed making the aggregate total 95.3 percent. Only 1.8 percent agreed that the EBT machines were placed in their neighborhood small stores when the program commenced.

Table 18. EBT List

ITEM	RESPONSE	PERCENT
	Strongly Agree	56.7
	Agree	35.1
When you first got your EBT card, did DSS give you a list of stores that accepted the card?	Uncertain	5.8
	Disagree	2.3
	Strongly Disagree	----

The data in Table 18 asked the respondents if the Department of Social Services provided a listing of stores that came on-line with the EBT system. As with several other variables, the majority of the respondents replied in the affirmative with 56.7 percent strongly agreeing and 35.1 percent agreeing. Only 5.8 percent of the recipients were uncertain or did not remember being provided a list and 2.3 percent disagreed with this item. The recipients were positive that they did not receive a listing of stores.

Table 19. EBT Problems

ITEM	RESPONSE	PERCENT
	Strongly Agree	54.4
	Agree	36.8
Do you feel that your caseworker does his/her part to help when you have problems with your EBT card?	Uncertain	8.2
	Disagree	.6
	Strongly Disagree	----

In order to assess the respondent's perception relative to their caseworkers, several items in the survey addressed the recipients' interaction with their caseworker. The first item as shown in Table 19 asked the respondents if their caseworker help them to solve problems with their EBT card.

Again, the vast majority (91.2 percent agreed) of the respondents believed their caseworker had done their part to eliminate problems concerning the EBT card. Several individuals (8.2 percent) were uncertain about their caseworker, while .6 percent disagreed that their caseworker did not do an adequate job solving the respondents' problems relative to the EBT card. Viewing the data, one could conclude that the caseworkers were extremely helpful in dealing with the recipients' problems as they were identified by the recipients.

Table 20. Caseworker Knowledge of EBT

ITEM	RESPONSE	PERCENT
	Strongly Agree	53.2
	Agree	36.3
My caseworker was knowledgeable about EBT benefits and procedures.	Uncertain	8.8
	Disagree	1.2
	Strongly Disagree	.6

When the researchers asked the respondents if their caseworker was knowledgeable about the EBT system, the aggregate of agreeing responses revealed that almost nine out of ten (89.5 percent) felt that caseworkers were knowledgeable about EBT. Only 1.8 percent disagreed.

Table 21. EBT Information

ITEM	RESPONSE	PERCENT
	Strongly Agree	54.4
	Agree	35.1
Overall, my caseworker kept me well informed about EBT.	Uncertain	8.2
	Disagree	2.3
	Strongly Disagree	----

Again, similar to the data found in the aforementioned table, Table 21 showed that caseworkers for the vast majority of the respondents (89.5 percent), felt that their caseworker provided information in a timely manner. However, 2.3 percent of the recipients stated that they disagreed to this variable and 8.2 percent were undecided.

As one respondent stated, “When the change took place, I was a little worried about using the card. But my caseworker kept telling me that I had nothing to worry about. She helps me all the time.” Another individual felt that the caseworkers sometimes went overboard especially when the recipients were going through the training program. Several other respondents perceived the training to be difficult at times.

Table 22. Caseworker Treatment

ITEM	RESPONSE	PERCENT
	Strongly Agree	55.0
	Agree	37.4
My caseworker treats clients with respect.	Uncertain	5.8
	Disagree	1.8
	Strongly Disagree	----

Viewing the data in Table 22, 55.0 percent of the respondents strongly agreed that their caseworker treated them with respect and 37.4 percent agreed. Less than eight percent of the respondents were uncertain or disagreed.

Table 23. Food Variety

ITEM	RESPONSE	PERCENT
	Strongly Agree	57.9
	Agree	35.1
Do you feel that you are able to buy a wider variety of foods with the EBT Card?	Uncertain	6.4
	Disagree	.6
	Strongly Disagree	----

The variable examining whether the respondents were able to purchase a wider variety of foods by using the EBT card as depicted in Table 23. The researchers examined the data and the results showed that almost sixty percent of the respondents strongly agreed that they purchased a wider variety of foods. Moreover, 35.1 percent agreed and only .6 percent disagreed regarding food variety. Given the nature of the item, we could only obtain information regarding this item by probing. Some of the comments given by the respondents were (1) "I tend follow the advertised sale items more now." (2) "I go to the stores on days they have specials."

As several of the individuals disagreed—many stated that they are more limited because they could no longer make purchases from places like the roadside farmer's markets or other smaller stores that did not go on line with the EBT system.

Table 24. EBT Account

ITEM	RESPONSE	PERCENT
Do you feel that the amount in your EBT account takes care of your food needs each month?	Strongly Agree	---
	Agree	10.6
	Uncertain	7.6
	Disagree	33.3
	Strongly Disagree	48.5

One significant item of the interview—"Do you feel that the amount in your EBT account takes care of your food needs each month?" This variable is viewed as a key determinant relative to the utilization of the EBT card, as

revealed in Table 24. Surprisingly, but anticipated by the researchers, no respondent strongly agreed to this variable and only 10.6 percent agreed. The overwhelming majority perceived that the amount of funds in their account was inadequate to fill their needs.

As one recipient stated—"I can barely make it to the end of the month." Another recipient told the researchers that the guidelines for setting the amount of funds they receive should be increased "They just don't give you enough with the way prices are today." As one person said, "They should put money in the budget for at least cost of living like other people get." Another respondent stated—"Almost every time I go to the store the prices seem to go up."

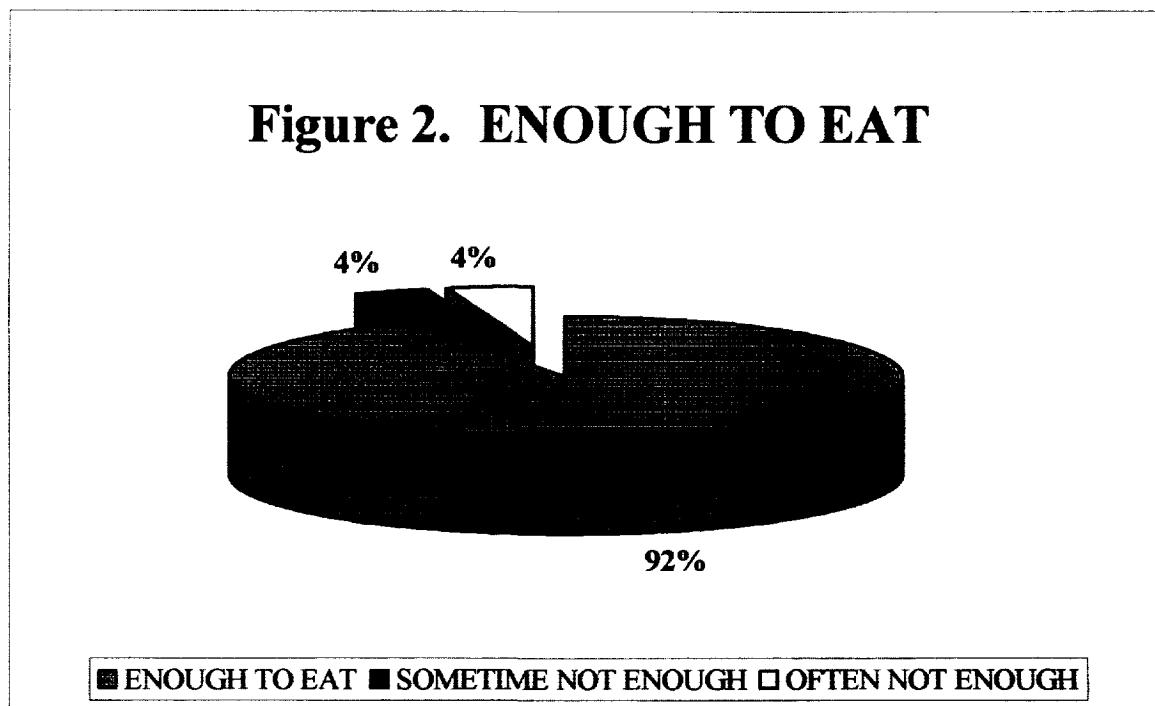
Table 25. EBT Satisfaction

ITEM	RESPONSE	PERCENT
Overall, would you say that you are satisfied with the EBT Program.	Strongly Agree	53.2
	Agree	40.9
	Uncertain	5.9
	Disagree	----
	Strongly Disagree	----

The variable examining the respondents perception in regards to the EBT program as depicted in Table 25 in relationship to their satisfaction of the program showed the following; 94.1 percent of the respondents are satisfied with the EBT program. No respondents reported that they were dissatisfied with the EBT program.

Food Security

Another vital aspect of this research effort on the effectiveness of the EBT program was to assess the recipients' monthly budgeting and food assurance practices. The researchers examined whether the respondents were able to function more, less, or if there were no changes in the behavioral patterns relative to their food purchasing and consumption activities through the implementation of the EBT card. The following results revealed several notes of significance in relationship to food purchasing and consumption habits.

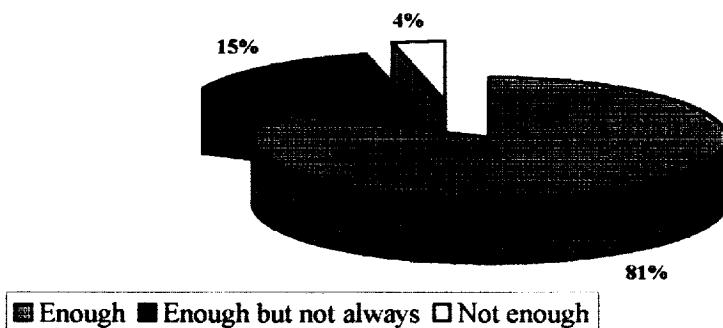


The respondents were asked—"Which of the following statements best describes the amount of food eaten in your household—enough to eat, sometimes not enough to eat or not enough to eat?" As revealed in Figure 2, the vast majority of the respondents reported that they were getting enough to eat (92

percent). Only four percent reported sometimes not enough and again 4 percent stating often not enough to eat.

One possible oversight by the researchers concerning this food item is that, as the item is stated above, we were not able to ascertain at this juncture whether the foods eaten were nutritious or not.

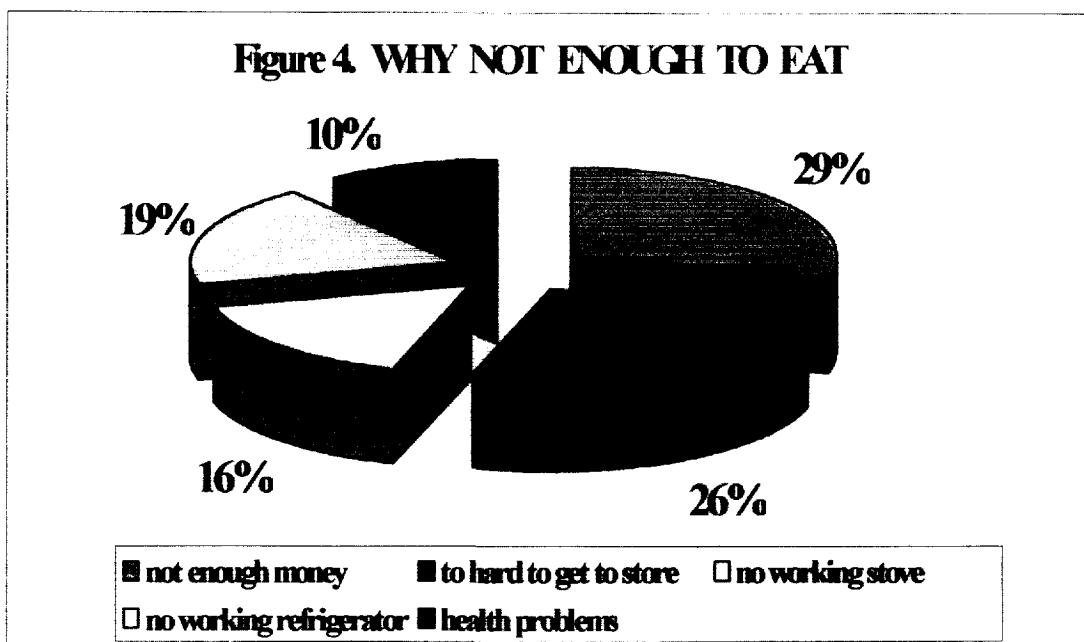
Figure 3. ENOUGH OF THE KINDS OF FOOD



Another item of the survey addressed the kinds of food with the following item — “Do you have enough of the kinds of food you want to eat, or do you have enough but not always the kinds of food you want to eat?” Viewing Figure 3, again, a vast majority of the respondents (81 percent) felt that they were getting enough of the kinds of food that they want to eat.

However, 15 percent of the respondent stated that they have enough but not the kinds of food they want. Identical to the data reported in Figure 2, four percent stated that they were not getting enough to eat. Even though four percent is a minute percentage for a sample of this size, it is still alarming when anyone in the United States of America report that they are not getting enough to eat.

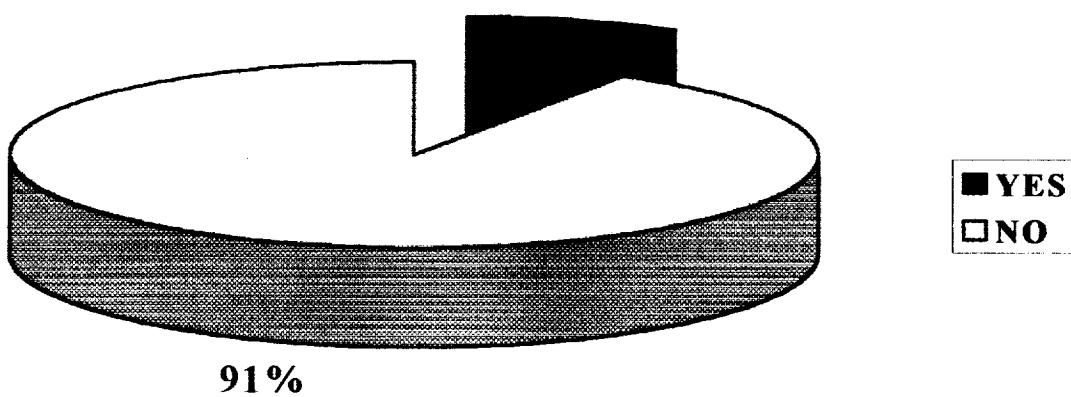
The researchers examined (utilizing content analysis) the responses given by the respondents relative to the reasons why they did not have enough to eat. This was an open-ended item to solicit the respondent's reasons as to why they did not have enough to eat. As shown in Figure 4., of the 172 persons that



responded to this item of the survey, twenty-nine percent reported that sometimes they just did not have the money.

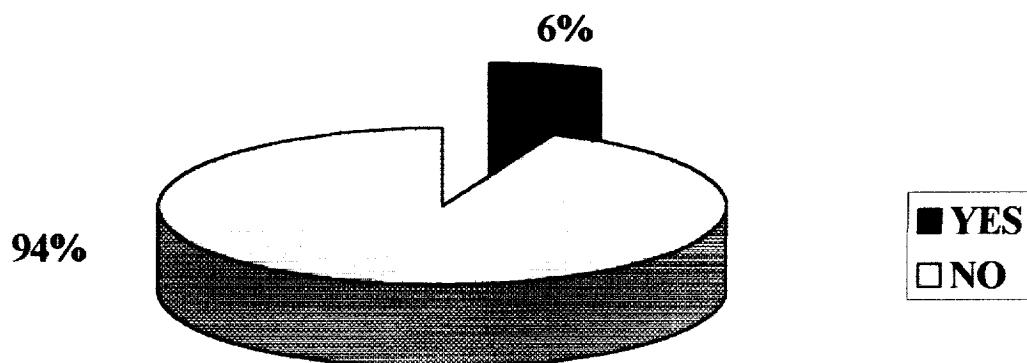
Following closely behind money, as a reason for not having enough to eat, was transportation problems. Twenty-six percent stated that "Sometime it was just too hard to get to the store." Of the remaining respondents, 19 percent did not have a functional refrigerator, 16 percent reported not having a functional stove and 10 percent listed health problems as the reason they were unable to have enough food to eat.

Figure 5. RUN SHORT OF MONEY



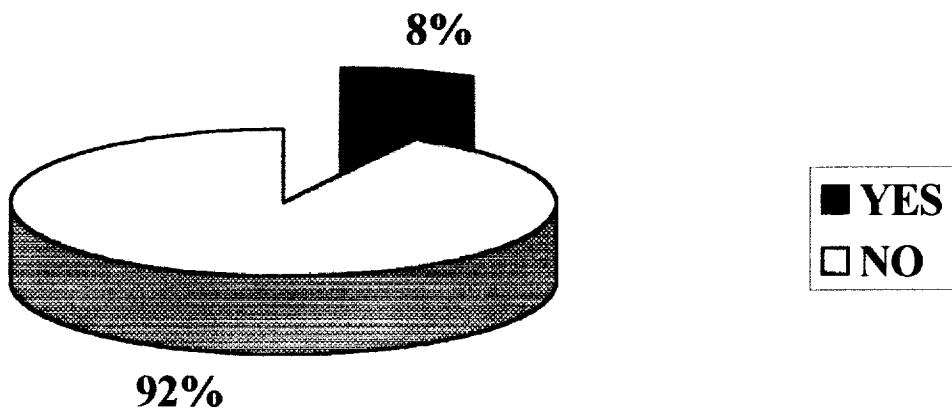
The respondents were asked—"In the last 12 months, did you ever run short of money and try to make your food or your food money go further?" As depicted in Figure 5, surprisingly, less than ten percent of the respondents said that they had ran short of money in the past twelve months.

Figure 6. RUN OUT OF FOOD FOR MEALS/NO MONEY



Viewing Figure 6, when the researchers asked the respondents—"In the past twelve months, did you ever run out of the foods that you needed to make a meal and didn't have money to get more?" Again only a small number of the respondents (six percent) reported that they ran out of foods for a meal and had no money to purchase food items.

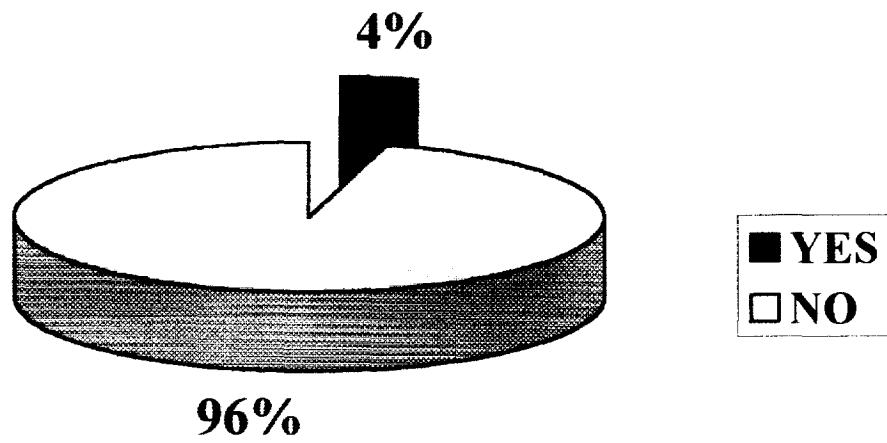
Figure 7. GET FOOD OR BORROW MONEY FROM FRIENDS/RELATIVES



When the researchers examined the responses to the item—"In the past twelve months, did you ever get food or borrow money for food from friends or relatives?" As revealed in Figure 7, only eight percent responded yes that they had to get food or borrow money to get food from friends or relatives.

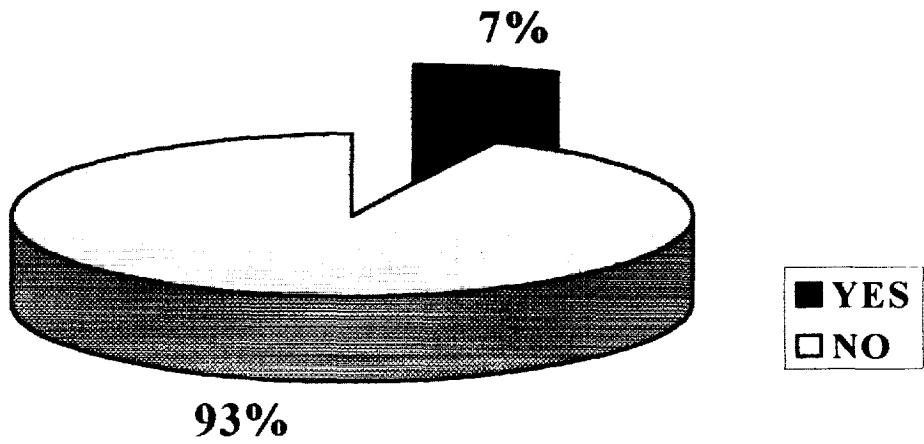
The aforementioned results indicate that an overwhelming majority of the respondents are seemingly managing their EBT food budgets very well. The researchers repeated the same variables but replaced the twelve months introduction with the statement—"Did this ever happen in the last 30 days?" The positive responses for the past thirty days were three percent or less for all of the food security items of the survey.

Figure 8. SEND OR TAKE CHILD/CHILDREN



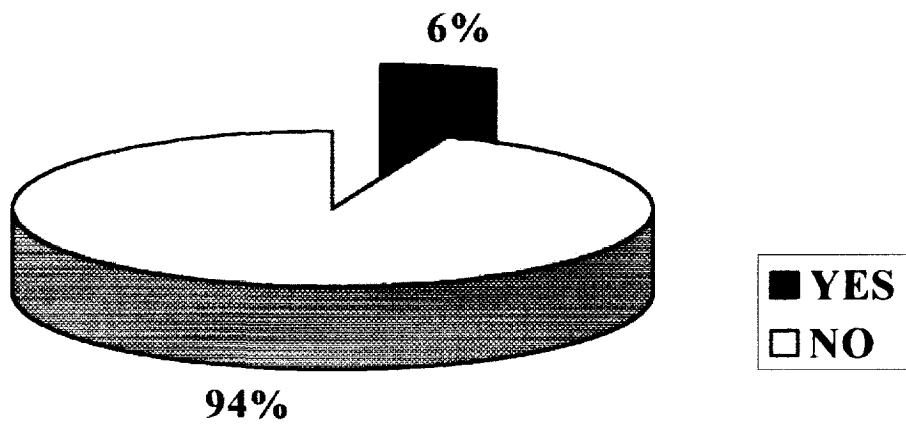
Concerning respondents with children, the researchers asked—"In the past twelve months, did you ever send or take your child/children to the homes of friends or relatives for meals because you were running out of food?" As shown above in Figure 8, only four percent of the respondents sent their child/children to friends or relatives for a meal when they were running out of food.

Figure 9. PUT OFF PAYING BILLS



The results from the item—"In the past twelve months, did you ever put off paying a bill so that you would have money to buy food?"—are presented in Figure 9. Less than ten percent of the respondents stated that they had put off paying bills in order to purchase food to eat. Only seven percent of the respondents answered positive.

Figure 10. FEW KINDS OF FOODS



The results in Figure 10 reflect responses to the item the researchers asked of the respondents, " In the past twelve months, did you ever serve only a few kinds of foods—like rice, beans, macaroni, bread or potatoes—for several days in a row because you couldn't afford anything else?" Only six percent of the respondents stated that they had done so.

The implication from these results may indicate that some of the respondents and their children are not receiving balanced or nutritious meals. Of chief concern and serious note would be the nutrient intake relative to the growth and development of their children.

Inferential Statistical Analyses

The researchers developed several scales from the items available in the second and third sections of the survey instrument to examine the psycho-social aspects of the Electronic Benefits Transfer (EBT) Program relative to its utilization by 424 program participants. The scales were constructed by using factor analysis.

Analyses on Section II

The researchers constructed four scales from items 1 to 25 to measure various attitudes and perceptions of the respondents with regard to the EBT program. The first scale, "satisfaction" was constructed from the average score of items 1, 2, 3, 4, 6, 14, 18, and 23. The scale measures the level of satisfaction among the program participants relative to the expected benefits of the EBT Program. The second scale, "EBT functionality", reflects the operational and functionality level of the EBT Program in rural South Carolina. The scale was computed by taking the average score the items 5, 12, 13, 15, 16, 17, 24, and 25. The third scale, "EBT training", represents perceived benefits from EBT Training. The scale consisted of the average score for items 7, 8, 9, 10 and 11. The fourth scale, "EBT assistance" represents opinions of the respondents about their caseworkers and the assistance they received from them. The scale was computed by taking the average score of the items 19, 20, 21, and 22.

The range for each of the four scales varied from 1 to 5. To examine the possible main and interaction effects of demographic factors such as race, education, and age on the scales, two-way analysis of variance test was

conducted. However, for examining only the main effects of the factors, t-test and one-way analysis of variance tests were conducted.

Table 26

**Results of T-test on the Electronic Benefits Transfer (EBT) Scales
By Race**

Scale	Black		White		t-value	p
	M	SD	M	SD		
EBT Satisfaction	4.46	.497	4.61	.407	-2.03	.043
EBT Functionally	4.38	.485	4.64	.374	-3.75	.000
EBT Assistance	4.37	.620	4.54	.600	-1.63	.105
EBT Training	4.03	.588	4.11	.633	-.72	.474

Table 26 presents the results of t-tests for the scales by race. As one of the independent variables for analyses, the researchers examined differences, if any, among the two groups in regards to the utilization of the EBT card. One can notice from the table that race had a significant main effect on the scales regarding satisfaction and functionality of the EBT program.

White participants were more satisfied with the EBT program and seemed to show more usage of the EBT card. Both ethnic groups showed similar views on EBT training and assistance by caseworkers. The mean scores for all the four scales were above 4.0, indicating that both groups had positive attitudes on all the scales.

Table 27

**Results of T-test on the Electronic Benefits Transfer (EBT) Scales
by Education**

Scale	Up to 11 th grade		12 th Grade & up		t-value	p
	M	SD	M	SD		
EBT Satisfaction	4.56	.398	4.50	.490	.66	.511
EBT Functionally	4.51	.416	4.46	.477	.62	.539
EBT Assistance	4.54	.458	4.40	.630	1.23	.226
EBT Training	3.92	.563	4.09	.611	-1.46	.152

Table 27 presents the results of t-tests for the scales by education. Respondents in both educational groups did not differ on any of the four scales (EBT Satisfaction, EBT Functionality, EBT Assistance and EBT Training) showing no difference in their perceptions on the issues. The mean scores for the scales ranged from 3.9 to 4.5. The scores indicated that both groups showed positive response on each of the scales

Table 28

**Results of T-Test on the Electronic Benefits Transfer (EBT) Scales
by Age**

Scale	25-35 years		36 years & up		t-value	p
	M	SD	M	SD		
EBT Satisfaction	4.34	.524	4.62	.411	-3.89	.000
EBT Functionality	4.35	.496	4.54	.434	-2.65	.009
EBT Assistance	4.26	.621	4.53	.594	-2.83	.005
EBT Training	3.99	.601	4.10	.603	-1.10	.272

Table 28 reports the results of t-tests by age. One can observe that the younger participants and older participants differed significantly in their perceived satisfaction, functionality, and the assistance level. Older participants were more satisfied with the EBT program than the younger participants.

The usage levels of the EBT card among the older participants were more than their younger counterparts. It seemed from the results that the older participants also showed a more positive attitude regarding assistance received from the caseworkers. Participants in both age groups showed similar views on EBT training.

In order to examine the variability in the sample, the researchers employed the analysis of variance statistical technique. Given the homogeneity of the purposive sample population and homoscedasticity around the best-fit line when we attempted Factor Analysis, therefore we utilized analysis of variance (ANOVA) because cases fall into different groups based on their values for one variable.

In the analysis of variance, we examined the observed variability which is then partitioned into two parts. The researchers explore the variability within the group and between the groups themselves.

The researchers performed analysis of variance to test the main and interaction effect of demographic factors on the four EBT scales. Due to the small sample size (males and whites), the analyses were conducted only with two-way ANOVA. The following tables present the findings from the analysis of variance.

Table 29

**Results of Analysis of Variance for Electronic Benefits Transfer
(EBT) Scales by Race and Age**

Scale	Source	Sum of Squares			
		df	F-Value	p	
EBT Satisfaction	Main Effect				
	Race	.703	1	3.45	.065
	Age	2.28	1	11.17	.001
	Two-way Interactions				
	Race x Age	.074	1	.366	.546
EBT Functionality	Main Effect				
	Race	2.17	1	11.01	.001
	Age	.839	1	4.26	.041
	Two-way Interactions				
	Race x Age	.118	1	.601	.439
EBT Assistance	Main Effect				
	Race	.693	1	1.91	.169
	Age	2.28	1	6.27	.013
	Two-way Interactions				
	Race x Age	.019	1	.052	.819
EBT Training	Main Effect				
	Race	.009	1	.026	.872
	Age	.759	1	2.09	.150
	Two-way Interactions				
	Race x Age	.581	1	1.60	.207

It can be observed from Table 29 that the main effect of age was not significant on satisfaction, functionality, and assistance, while the main effect of race was statistically significant on functionality. However, the interaction effect of race and age were not statistically significant.

Table 30

Results of One -Way Analysis of Variance on Electronic Benefits Transfer (EBT) Scales by Education and Age

Scale	Source	Sum of Squares	df	F-Value	p
EBT Satisfaction	Main Effect				
	Education	.154	1	.745	.389
	Age	1.03	1	5.00	.027
	Two-way Interactions				
EBT Functionality	Education x Age	.258	1	1.38	.242
	Main Effect				
	Education	.131	1	.627	.430
	Age	.450	1	2.15	.145
EBT Assistance	Two-way Interactions				
	Education x Age	.170	1	.810	.369
	Main Effect				
	Education	.506	1	1.39	.241
EBT Training	Age	1.23	1	3.36	.069
	Two-way Interactions				
	Education x Age	.091	1	.249	.618
	Main Effect				
	Education	.622	1	1.71	.193
	Age	.244	1	.669	.415
	Two-way Interactions				
	Education x Age	.003	1	.009	.925

Table 30, reports the main and interaction effects of education and age on the four EBT scales. One can notice that the main effect of age was significant on satisfaction. Interaction effects of education and age were not significant on any of the scales.

Table 31

Results of Analysis of Variance for Electronic Benefits Transfer (EBT) Scales by Race and Education

Scale	Source	Sum of Squares	df	F-Value	p
EBT Satisfaction	Main Effect				
	Race	.066	1	.303	.583
	Education	.003	1	.015	.904
	Two-way Interactions				
EBT Functionality	Race x Education	.771	1	3.54	.062
	Main Effect				
	Race	.815	1	4.02	.047
	Education	.000	1	.001	.976
EBT Assistance	Two-way Interactions				
	Race x Education	.384	1	1.90	.171
	Main Effect				
	Race	.002	1	.005	.943
EBT Training	Education	.188	1	.509	.477
	Two-way Interactions				
	Race x Education	1.51	1	4.09	.045
	Main Effect				
EBT Training	Race	.002	1	.006	.941
	Education	.992	1	2.75	.099
	Two-way Interactions				
	Race x Education	.765	1	2.12	.147

Table 31 presents the main and interaction effects of race and education on the four EBT scales. The main effect of race was significant on functionality of the EBT program as well as the interaction effects of race and education were significant on assistance by caseworkers.

To explore more on the interaction effects of race and education on the four EBT scales, the researchers performed one-way analysis on the scales by combining the categories of race and education. The results of the analysis are reported in Table 32. Among black respondents, lower educated respondents were more satisfied with the EBT program than their higher educated counterparts. Among whites, the education did not make any difference in their satisfaction. Among higher educated respondents, whites were more satisfied with the EBT program than their black counterparts.

Table 32

Results of Analysis of Variance for Electronic Benefits Transfer (EBT)Scales by Education and Race

Scale	Source	Sum of Squares	df	F-Value	p
EBT Satisfaction	Between Groups	1.7448	3	2.6686	.0494
	Within Groups	35.9606	165		
	Total	37.7054	168		
EBT Functionality	Between Groups	2.8718	3	4.7156	.0035
	Within Groups	33.4951	165		
	Total	36.3669	168		
EBT Assistance	Between Groups	2.8840	3	2.6017	.0538
	Within Groups	60.9666	165		
	Total	63.8506	168		
EBT Training	Between Groups	1.7829	3	1.6465	.1807
	Within Groups	59.5571	165		
	Total	61.3400	168		

Among higher educated participants, the usage of the EBT card by white participants was more than by black participants. Among lower educated

respondents, the race did not make any difference. Among black respondents, lower educated respondents showed a more positive attitude towards the EBT program than their higher educated counterparts.

Whites in both educational groups had similar views on EBT assistance. Among higher educated respondents, whites showed a more positive attitude towards the EBT assistance program than their black counterparts. However, among lower educated respondents, race did not make any difference. One can notice that the four categories of race and education showed no difference in the perception on EBT training.

The “acceptance” scale was created by counting “no” responses on items 58, 59, 60, 61, 62, 63, and 64, and converting the score to its percentage. Values of the scale range from 0 to 100. The scale represented the perceived level of acceptance by the members of the society when respondents used the EBT card. The higher the score, the greater is the level of acceptance.

Table 33

**Results of T-Test on Acceptance Scale by Race,
Education and Age**

Demographic Variable	M	SD	t-value	p
Race				
Black	94.31	14.10	-.49	.622
White	95.49	16.78		
Education				
Up to 11 th grade	91.71	20.79	-1.18	.238
12 th grade & up	95.17	13.05		
Age				
25 – 35 years	91.71	18.39	-1.73	.087
36 years & up	96.20	11.93		

Table 33 reports the results of t-tests on this scale by race, education, and age. One can notice from the table that the respondents from both ethnic groups did not differ on the scale. The respondents from educational groups as well as from age groups also had similar views on the issue.

Since the mean percent for all the groups were above 90, it shows that the acceptance levels among all the groups were very high. It seemed that the respondents did not feel embarrassed, and they were not treated disrespectfully from others when they used the EBT card.

Tables 34, 35, and 36 report the respondents' shopping behavior by race, education, and age, respectively. The tables report if the respondents shopped in the supermarkets more or less than they had before the EBT card, and where the respondents used their EBT card most.

Table 34

Shopping Behavior of the Respondents by Race

Variable		Black N	Black %	White N	White %	Total N	Total %
Do you shop in the supermarkets more or less than before EBT Card?							
More		21	18.6	4	7.0	25	14.7
About the same		90	79.6	52	91.2	142	83.5
Less		2	1.8	1	1.8	3	1.8
Where do you usually use your EBT card the most?							
Supermarket		104	92.0	48	84.2	152	89.4
Medium size store		7	6.2	9	15.8	16	9.4
Neighborhood store		2	1.8	--	--	2	1.2

From Table 34, one can notice that around 90 percent of blacks and 91 percent of whites shopped in the supermarkets about the same number of times when they used food stamp coupons. About 19 percent of black respondents and only 7 percent whites shopped more since they had the EBT card. Only 2 percent of black and white respondents shopped less since they had the EBT card.

More than 92 percent of blacks and 84 percent of whites used their EBT card in the supermarkets. At least 15 percent of whites and only 6 percent of blacks used their EBT card in medium stores. Only 2 percent of black respondents reported that they used the EBT card in neighborhood stores.

Table 35
Shopping Behavior of the Respondents By Education

Variable	Up to 11th Grade		12th Grade & Up		Total	
	N	%	N	%	N	%
Do you shop in the supermarkets more are less than before EBT Card?						
More	1	3.2	25	18.0	26	15.3
About the same	29	93.5	112	80.6	141	82.9
Less	1	3.2	2	1.4	3	1.8
Where do you usually use your EBT card the most?						
Supermarket	28	90.3	123	88.5	151	88.8
Medium size store	3	9.7	13	9.4	16	9.4
Neighborhood store	--	--	3	2.2	3	1.8

Table 35 reports the shopping behavior of the respondents by education. Among higher educated respondents, at least 80 percent of the respondents

shopped about the same number of times as they had before food stamps, while 18 percent shopped more, and only 1 percent shopped less.

Among lower educated respondents, at least 93 percent of the respondents shopped about the same number of times as they had before food stamps. Only 6 percent shopped more or less. More than 88 percent of the respondents from both groups used their EBT card in the supermarkets, while about 9 percent from both groups used their EBT card in medium size stores. Only 2 percent higher educated respondents used their EBT card in neighborhood stores.

Table 36

Shopping Behavior of the Respondents By Age

Variable	25-35 years		36 years & up		Total	
	N	%	N	%	N	%
More	10	16.1	16	14.7	26	15.2
About the same	50	80.6	92	84.4	142	83.0
Less	2	3.2	1	.9	3	1.8
Where do you usually use your EBT card the most?						
Supermarket	52	83.9	100	91.7	152	88.9
Medium size store	7	11.3	9	8.3	16	9.4
Neighborhood	3	4.8	--	--	3	1.8

Table 36 reports the shopping behavior of the respondents by age. Among younger respondents, at least 80 percent respondents shopped about the same number of times as they had before food stamps, while 16 percent shopped more, and only 3 percent shopped less. Among older respondents, at least 84 percent of

the respondents shopped about the same number of times as they had before food stamps.

Around 15 percent shopped more, and only 1 percent shopped less. More than 83 percent of the younger respondents and 92 percent of the older respondents used their EBT card in the supermarkets. About 8 to 11 percent from both groups used their card in medium size stores. Only five percent of the younger respondents used their EBT card in neighborhood stores.

Analysis on Section III

The third section deals with “food security for the participants.” The researchers developed seven scales based on the 12-month period and 30-day period to examine the functional/dysfunctional levels of the Electronic Benefits Transfer (EBT) Program relative to the participants' quality of life or well being. The first five scales were constructed for the respondents and the last two scales were constructed for their children. The first scale, “long-term deprivation in participants”, reflects the perceived deprivation among the respondents in the extended period of 12-month. The scale was computed by counting the “yes” responses of the participants to items 8, 9, and 10, and then converting the scores to the percentages.

The second scale, “long-term survival index for participants” was constructed by counting the positive responses on the items 12 through 17, and by prorating the scores to their percentages. The scale shows how the participants survived by getting help from other sources when they were out of money or food in the last 12 months. The third scale, “long-term difficulty index for participants” indicates the level of difficulties and problems the

respondents faced when they did not have enough money to buy food in the last year. The scale was constructed from the items 18, 22, 26, 29, and 32. The fourth scale, “short-term deprivation in participants”, was based on item 10.

The scale reflected the perceived deprivation among the respondents in the short period of the last 30 days. The fifth scale, “short-term difficulty index for participants” indicated the level of difficulties and problems the respondents faced when they did not have enough money to buy food in the last 30 days. The scale was constructed from items 20, 24, 27, 30, and 33.

The sixth scale, “long-term difficulty index for children of the participants” indicated the level of difficulties children faced because of the lack of food in the last 12 months. It was computed by counting the “yes” responses of the participants to items 34, 37, and 41, and then converting the scores to the percentages. The seventh scale, “short-term difficulty index for children of the participants” indicated the level of difficulties children faced because of the lack of food in the last 30 days. The scale was constructed from the items 35 and 39. Since all the scales were based on percentages, they ranged from 0 to 100.

To examine only the main effects of the demographic factors such as race, education, and age, t-test and one-way analysis of variance tests were conducted. To examine the possible main and interaction effects of the factors on the scales, two-way analysis of variance test was conducted.

Table 37
Results of T-Test on Food Security Scales by Race and Status

Status	Scale	Black		White		t-value	df	p
		M	SD	M	SD			
Respondents								
	Long term-Deprivation	8.19	24.91	2.05	10.94	2.24	169	.027
	Long term-Survival Index	4.71	14.82	3.80	15.19	.37	169	.709
	Long term-Difficulty Index	1.62	7.71	3.51	15.64	-.86	169	.393
	Short term-Deprivation	4.39	20.57	3.51	18.56	.27	169	.786
	Short term-Difficulty Index	1.75	10.15	3.63	13.16	-1.03	169	.306
Children								
	Long term-Difficulty Index	1.32	8.34	2.92	13.03	-.98	169	.330
	Short term-Difficulty Index	1.79	11.49	2.63	14.70	-.41	167	.682

Table 37 presents the results of t-tests on these scales by race. The scale shows that the long-term deprivation among black and white ethnic groups differed significantly at the 5 percent level. Deprivation was higher among black respondents than in whites. However, the ethnic groups did not differ in any of the other scales. Means for both groups on all scales were very low, indicating

that both groups have less problems in getting enough food, and the EBT program was functioning properly.

SUMMARY AND DISCUSSION

The ever increasing number of individuals befallen or that are succumb by poverty has renewed a new consciousness to their plight among those more fortunate. However, with new acts by Congress and further efforts by the "White House" to eliminate welfare as such, millions of Americans continue to be besieged by poverty.

In 1977, the Food Stamp Act changed to help all eligible participants to obtain a more nutritious diet through normal channels of trade by increasing their food purchasing power by instituting food coupons. Within the past decade, the United States Department of Agriculture has experimented with Electronic Benefit Transfer (EBT) projects as a mechanism for enhancing the food delivery system. According to the South Carolina Department of Social Services, EBT is presently being utilized in South Carolina with more than 140,000 recipients and 3,095 retailers participating at the time of this study.

As indicated previously in the objectives, it is imperative to provide knowledge relative to the utilization of the EBT card and its clientele. Most studies of the EBT program to date have focused on the economic aspect of the program. This investigation concentrated on the program participants' perceptions, attitudes, beliefs and their quality of life are both descriptive and analytical .

The specific objectives were as follows: [1] To examine differentials among program participants in regards to several independent variables (e.g., age, race, sex and educational attainment) on the usage of and attitudes toward the

Electronic Benefit Transfer (EBT) Program in rural South Carolina. [2] To determine the functional/dysfunctional levels of the Electronic Benefit Transfer Program relative to the participants' quality of life or well-being and [3] To examine the levels of satisfaction among the program participants relative to the expected benefits of the Electronic Benefits Transfer Program.

In order to address the hypotheses and objectives empirically, the researchers constructed an instrument and utilized a Purposive Sampling technique on more than 500 households. Because of the confidentiality law, it was not possible to randomly select a sample of recipients for this study. The selection of sampling units was made from a list of recipients who consented to participate in this study. These recipients served as the sample population representing various groups based on sex, race, and family status, equal number of recipients will be selected from the given list. Due to the fact that the size of target population consisting of DSS recipients is not defined, it was appropriate to use purposive sampling to represent various groups.

The participants were selected from a list of DSS Clientele who consent to participate in this research project. Once the lists of volunteer recipients were complied, the sample was selected from this list. The researcher used another consent form before conducting the face-to-face interviews.

The data analysis plan involved both univariate and multivariate statistical techniques. The univariate statistics such as frequencies, relative frequencies, means, standard deviations, ranges were used to describe the trends and patterns among various groups of respondents.

The multivariate statistical techniques such as T-test, multiple regression and analysis of variance was employed to examine the effects of factors such as sex, race, age and education on the socio-psychological outcomes among the rural recipients. The some socio-psychological outcomes were measured by

several variables based on five-point Likert-type scales ranging from “1” (strongly agree) to “5” (strongly disagree). Other variables were measured by using various descriptive categories on nominal as well as ordinal scale.

A descriptive summary of the socio-economic characteristics of the sample revealed that, the mean age of the recipients who use the EBT card in this sample is 33.7 years, slightly more than two-thirds (66.7 percent) being black, almost half being employed (mainly in low-paying service jobs), almost seven out of ten were not married and the majority of the respondents had obtain a twelfth grade educational level (81.8 percent) or higher. However, on the income variable, 87 percent of the sample were below the poverty level.

While it is imperative to characterize the sample, it is equally important to have valid analysis of the data set regarding the respondents’ perceptions, attitudes and beliefs relative to the EBT program. Analysis of the EBT data set demonstrated the following:

- The T-test results for the independent variable race on the four EBT scales showed that race had a significant main effect on satisfaction and functionality.
- Whites were more satisfied with the EBT program, however, both groups had positive attitudes on all four scales.
- With regards to education, there were no significant differences on any of the four scales.
- Significant statistical difference surfaced in relationship to age and the four scales. Not anticipated, older respondents were more satisfied and had a more positive attitude towards assistance received from their caseworker.

In addition to the aforementioned findings, the researchers performed analysis of variance (ANOVA) to test the main and interaction effect of the

demographic factors on the four EBT scales. Again, significant differences surfaced in regards to the race and education variables. Among higher educated EBT recipients, the usage of the EBT card by white participants were more than by black participants. Race did not show any differences among lower educated participants.

A crucial sector of the survey dealt with the respondents' perception of the public attitudes towards themselves as EBT card users. The T-test results on the "Acceptance" scale showed no difference with regards to race, age or education. However, the mean percent of all of the groups was above 90, this revealed a high acceptance level which indicate that the respondents did not feel embarrassed nor did they feel that they were treated disrespectful by others when they used their EBT card.

Finally, as alluded to previously, given the homogeneity of the sample, several items of the survey produced little or any dispersion. In summation, the findings of this investigation suggest that a more comprehensive and comparative (urban population) study is needed to explain variation that may emerge relative to the EBT system. Also, it is suggested that a larger investigation should include a sampling from the general populace to ascertain this sector's perceptions and attitudes towards the EBT program.

REFERENCES

- Baker, Michael and Dwayne Benjamin
1995 "The receipt of transfer payments by immigrants to Canada." *The Journal of Human Resources.* 30 (4): 650-676.
- Blank, Rebecca M. and Patricia Ruggles
1996 "When do women use aid to families with dependent children and food stamps?" *The Journal of Human Resources.* 31 (1): 57-89.
- Collins, Alice H.
1973 *The Human Services: An Introduction.* New York: The Odyssey Press.
- Eshleman, J. Ross, et. al.
1993 *Sociology: An Introduction.* Fourth Edition. New York: Harper Collins.
- Fraker, Thomas M., Alberto P. Martini and James C. Ohls.
1995 "The effect of food stamp cashout on food expenditures." *The Journal of Human Resources.* 30 (4): 636-649.
- Gahvari, Firouz
1995 "In-kind versus cash transfers in the presence of distortionary taxes." *Economic Inquiry.* 33 (January): 45-53.
- Goodman, Nancy
1985 "The psychological impact of being on welfare." *Social Services Review.* 59 (3): 404-422.
- Hagstrom, Paul A.
1996 "The food stamp participation and labor supply of married couples." *The Journal of Human Resources.* 31 (2): 383-403.
- Hasenfeld, Yeheskel and Richard A. English
1978 *Human Service Organizations.* Ann Arbor, MI: The University of Michigan Press.

- Howes, Candace and Ann R. Markusen
1981 Poverty: A regional political perspective. Pp. 437-463 in Amos H. Hawley and Sara Mills Mazie (eds.), Nonmetropolitan America in Transition. Chapel Hill, NC: The University of North Carolina Press.
- Hoynes, Hilary W.
1997 "Welfare transfers in two-parent families: Labor supply and welfare participation under AFDC-UP." *Econometrica* 64 (2): 295-332.
- Humphrey, David B.
1996 "The Economics of Electronic Benefit Transfer Payments". *Economic Quarterly*. 82 (2): 77-94.
- Merton, Robert
1968 Social Theory and Social Structure. New York: Free Press.
- Moland, Jr., John
1981 "The black population." pp. 464-501 in Amos H. Hawley and Sara Mills Mazie (eds.), Nonmetropolitan American in Transition. Chapel Hill, NC: The University of North Carolina Press.
- Parsons, Talcott
1951 The Social System. Glencoe, IL: Free Press.
- Prazdny, Bronja
1996 "Lyndon Baines Johnson State of the Union Address - 1964." Prepared for the American Revolution - An .HTML on the WWW. Dep. Alfa-Informatica University of Groningen.
- Robertson, Ian
1987 Sociology. New York: Worth Publishers, Inc.
- Rosenzweig, Mark R. and Kenneth I. Wolpin
1994 "Parental and public transfers to young women and their children." *The American Economic Review*. 84 (5): 1195-1212.

- Rossi, Peter
1978 "Issues in the evaluation of human services delivery."
Evaluation Quarterly. 2 (4): 573-599.
- Rossi, Peter and Howard E. Freeman
1982 *Evaluation: A Systematic Approach*. Beverly Hills, CA: Sage Publications.
- South Carolina EBT
1996 South Carolina Electronic Benefits Transfer Fact Sheet.
Department of Social Services. Columbia, SC.
- Spencer, Herbert
1958 *First principles of a New System of Philosophy*. New York:
DeWitt Revolving Fund.
- The Economist
1997 "Bar-coding the poor." 324 (8001): 56.
- U. S. Department of Commerce
1994 Bureau of the Census: County and City Data Book. 12th Edition.
- U. S. House of Representatives
1992 From Paper to Plastic: Electronic Benefit Transfer (EBT)
Programs for Food Stamps and Other Federal Benefits. April 15th.
Serial No. 102-74. Washington, DC: Government Printing Office.
- U. S. House of Representatives
1994 Ways of Increasing Access of Low- and Moderate-Income
Americans to Financial Services. August 11th. Serial No. 103-161.
Washington, DC: Government Printing Office.
- U. S. House of Representatives
1995 The Food Stamp Program and Electronic Benefit Transfer Systems.
May 10th. Serial No. 104-13. Washington, DC: Government
Printing Office.
- U. S. Senate
1994 Fraud in Federal Nutrition Programs. February 2nd.
Washington, DC: Government Printing Office.

APPENDICES

APPENDIX A

1890 RESEARCH PROGRAM SOUTH CAROLINA STATE UNIVERSITY ORANGEBURG, SOUTH CAROLINA

INDIVIDUAL INSTRUMENT

A Survey Of “EBT” Participants Spring 1997

City/Town: _____

Interview Number: _____ Interviewer Number: _____

Address _____

Date of Interview: _____ Time Started ____: ____ AM/PM Ended ____: ____ AM/PM

Respondent's: **Sex - Male: 1 Female: 2 Race - Black: 1 White: 2 Other: 3**
(Circle one)

[Read this Statement to the respondent] This survey consists of a number of statements about EBT (Electronic Benefit Transfer). Some may apply to you, others may not. We want your own personal feelings about each of the statements. Your response to each item is very important. All answers are **confidential**. Your name(s) will not appear anywhere in the analysis or reports from this interview. ***The results are for research purposes only and will not affect any benefits you may be receiving now or in the future.*** Again, **all of your answers are strictly confidential**. This survey is **voluntary** and is funded by Food and Consumer Service, USDA. The survey will take approximately an hour.

Section I: Demographic Information

Now, I would like to ask you some questions about you and other persons living in this household (*For statistical purposes only*).

1. Please tell me the number of persons that live in this house year round.
Adults _____ Children _____ (0-17 years)
2. What is your current age? _____
3. What is the highest grade that you completed in school? _____
[If less than 12 years, ask # 4; If more than 12 years, ask #5]
4. Did you get a high school diploma or a GED certificate? Yes _____ No _____
[If No ask question 6]
5. Did you attend college? Yes _____ No _____ Obtain a degree? Yes _____ No _____
6. What is your current marital status? (CIRCLE ONE)

Married 1 Divorced 2 Separated 3
Widowed 4 Never Married..... 5
7. Are you currently employed? Yes _____ No _____
[If yes to item 7, ask item 8 -- if no, then ask item 10.]
8. Are you employed? Full-time _____ or Part-time _____
9. What is your present occupation / job? _____
10. If unemployed, then what was the last job held? _____
11. If unemployed, how long have you been without a job? _____
12. Is your spouse currently employed? Yes _____ No _____
[If yes to # 12, ask # 13 -- if no , then ask # 15]

13. What is your spouse's present occupation/job? _____
14. Is spouse employed? Full-time _____ Part-time _____
15. If unemployed, then what was the last job held? _____
16. If unemployed, how long have you been without a job? _____
17. In which of these categories was your total family income for last year before taxes and from all sources (for research purposes only and will not affect any benefits you may be receiving now or in the future):
- a. Under \$1,000 -----01
b. \$1,000 to 2,999 -----02
c. \$3,000 to 4,999 -----03
d. \$5,000 to 7,999 -----04
e. \$8,000 to 9,999 -----05
f. \$10,000 to 12,499 -----06
g. \$12,500 to 14,999 -----07
h. \$15,000 to 17,499 -----08
i. \$17,500 to 19,999 -----09
j. \$20,000 + -----10
Refused ----- 97
DON'T KNOW ----- 98

**TOTAL INCOME INCLUDES ALL INTEREST OR DIVIDENDS, RENT,
SOCIAL SECURITY OR OTHER PENSIONS, ALIMONY OR CHILD SUPPORT,
UNEMPLOYMENT COMPENSATION, SSI, ARMED FORCES OR VETERAN'S
ALLOTMENT.**

18. Is your residence (check one):

Single family dwelling Duplex Apartment
 Condominium Mobile home (trailer) Other _____

19. How many rooms (bathroom excluded) does your dwelling have? _____

20. In regards to your residence, are you presently;

____ Buying ____ Renting ____ Own (mortgage paid for) ____ Other _____

21. How would you rate the condition of your present home? Would you say that it needs:

No repairs	1
Only a few repairs (less than \$500.00)	2
Minor repairs (\$500-\$999.00)	3
Major repairs (greater than \$1000.00)	4

22. Approximately, what is the value of your residence today? \$ _____

23. [Rural area/open country] How close is your nearest neighbor(s)?

Next door	1
Within 1/4 of a mile	2
Less than 1/2 mile	3
Approximately one mile	4
Two to three miles	5
More than three miles	6

24. In general, how would you say your health is today?

Excellent	1
Good	2
Fair	3
Poor	4
Don't Know	8
Refused	9

25. What type of transportation do you normally use to grocery shop?

Own car or truck.....	1
Taxi cab	2
Friend/relative	3
Bus	4
Agency Transportation	5

Other 6
List _____

Section II: Electronic Benefits Transfer Program (EBT)

At this time, I would like to ask you some questions associated (about) with EBT. Please respond to the best of your knowledge. Again, all information you give me will be kept strictly *confidentially* and used only for this study. Your name will never be associated with your answers. This survey will collect information for research purposes only! You have been selected to represent others in your community. We do appreciate your input.

Now, I would like to ask you several items or statements. As each statement applies to you, would you please respond **strongly agree; if it applies only partially, answer **agree**; if you are not certain that it relates to you, answer **undecided or uncertain**; if you think that it is not true, respond **disagree**; and if it is definitely not true, answer **strongly disagree**.**

(CIRCLE ONE ANSWER FOR EACH QUESTION)

	<u>Strongly Agree</u>	<u>Agree</u>	<u>Uncertain</u>	<u>Disagree</u>	<u>Strongly Disagree</u>
1. When DSS changed to the Electronic Benefits Transfer System from the Food Stamp Coupons, would you say that the system is better now?	1	2	3	4	5
2. Is your life situation better today using the EBT Card than the coupons?	1	2	3	4	5
3. I feel a lot better using the EBT Card than coupons.	1	2	3	4	5

4. I don't feel ashamed when using my EBT Card.	1	2	3	4	5
5. Do you feel that EBT has made your grocery shopping easier?	1	2	3	4	5
6. Do you feel that people working in the grocery stores are more friendlier since you use the EBT Card?	1	2	3	4	5
7. Do you feel the EBT training was helpful?	1	2	3	4	5
8. Do you feel that the training on how to use the EBT Card was adequate or enough?	1	2	3	4	5
9. Do you feel that you could have used your EBT Card without going through the training?	1	2	3	4	5
10. When I first got the EBT Card I had a lot of problems when I tried to use my card.	1	2	3	4	5
11. Do you feel that your EBT Training has made grocery shopping easier?	1	2	3	4	5
12. Do you feel that it is easy for you to keep up with the balance left in your EBT account?	1	2	3	4	5
13. Do you feel that the EBT Helpline was useful to you when inquiring about your balance?	1	2	3	4	5
14. When I use my EBT Card I feel much better than when I was using the old Food Stamps Coupons.	1	2	3	4	5

15. Do you feel that not enough stores had the EBT machine in your neighborhood?	1	2	3	4	5
16. Do you feel that all of the small neighborhood stores had EBT Card machine in time for you to use them?	1	2	3	4	5
17. Do you feel that when you first got your EBT Card, DSS should've given you a list of stores that accepted the card?	1	2	3	4	5
18. Do you feel that you are satisfied with the EBT switch over process?	1	2	3	4	5
19. Do you feel that your caseworker did his/her part to help when you had problems with your EBT card?	1	2	3	4	5
20. Your caseworker was knowledgeable about EBT benefits and procedures.	1	2	3	4	5
21. Overall, your caseworker kept you well informed about EBT.	1	2	3	4	5
22. Your caseworker treats clients with respect.	1	2	3	4	5
23. Overall, would you say that you are satisfied with the EBT program?	1	2	3	4	5
24. Do you feel that the amount in your EBT account takes care of your food needs each month?	1	2	3	4	5
25. Do you feel that you are able to buy a wider variety of food with the EBT Card?	1	2	3	4	5

26. Not counting trips to pick up just a few items, how often do you go food shopping?

- | | |
|----------------------------|----|
| More than a week | 01 |
| Once a week | 02 |
| Once every two weeks | 03 |
| Once a month | 04 |

27. At what kind of store do you usually do your food shopping?

- | | |
|----------------------------------|----|
| Supermarket | 01 |
| Neighborhood grocery store..... | 02 |
| Convenience store | 03 |
| Warehouse or discount store..... | 04 |
| Some other kind of store | 05 |

List _____

28. Now that you use your EBT Card instead of Food Stamp Coupons, do you shop at the supermarket more?

- | | |
|----------------------|----|
| More | 01 |
| About the same | 02 |
| Less | 03 |
| Don't know | 08 |
| Refused | 09 |

29. Do you do most of your food shopping at the same store?

- | | |
|------------------|----|
| Yes | 01 |
| No | 02 |
| Don't know | 08 |
| Refused | 09 |

30. Do you do most of your food shopping at a store near your home or do you travel outside your neighborhood?

- | | |
|-----------------------------------|----|
| Close by (less than a mile) | 01 |
| Outside of the neighborhood | 02 |

31. When you do your food shopping, do you make a list of items to purchase?

Sometimes	01
Always	02
Never	03

32. When you do your shopping, do you ever use money off coupons cut from the newspaper, magazines, etc.?

Sometimes	01
Always	02
Never	03

33. When you food shop, do you go on the day(s) that supermarkets have their specials or bonus day?

Sometimes	01
Always	02
Never	03

34. When you shop for food, do you stick to your list of items you made before going to the store when making your food purchases?

Sometimes	01
Always	02
Never	03

35. When you food shop, do you plan a balance menu of items to purchase?

Sometimes	01
Always	02
Never	03

36. When you food shop, are you limited to the number of stores that you can go to because of problems with transportation?

Sometimes	01
Always	02
Never	03

37. When you food shop at the grocery store, do you take your children to the store with you?

Sometimes	01
Always	02
Never	03

38. Now that you have the EBT Card, do you shop in the supermarkets more or less than when you used Food Stamp Coupons?

More	01
About the same	02
Less	03
Don't know	08
Refused	09

39. Where do you usually use your EBT Card the most?

Supermarket	01
Medium size store	02
Small grocery store	03
Convenience store	04
Neighborhood store	05

40. How close is the nearest supermarket to your home?

Less than a half-mile	01
Half-mile to a mile	02
One to two miles	03
Three to five miles	04
Five to ten miles	05
Greater than ten miles.....	06

41. How close is the nearest medium size grocery store to your home?

Less than a half-mile	01
Half-mile to a mile	02
One to two miles	03
Three to five miles	04
Five to ten miles	05
Greater than ten miles.....	06

42. How close is the nearest convenience store to your home?

- | | |
|------------------------------|----|
| Less than a half-mile | 01 |
| Half-mile to a mile | 02 |
| One to two miles | 03 |
| Three to five miles | 04 |
| Five to ten miles | 05 |
| Greater than ten miles | 06 |

43. How close is the nearest small grocery store to your home?

- | | |
|------------------------------|----|
| Less than a half-mile | 01 |
| Half-mile to a mile | 02 |
| One to two miles | 03 |
| Three to five miles | 04 |
| Five to ten miles | 05 |
| Greater than ten miles | 06 |

44. Is the supermarket you usually food shop at clean and sanitary?

- | | |
|-----------------|----|
| Sometimes | 01 |
| Always | 02 |
| Never | 03 |

45. Is the medium size store you usually food shop at clean and sanitary?

- | | |
|-----------------|----|
| Sometimes | 01 |
| Always | 02 |
| Never | 03 |

46. Is the convenience store you usually food shop at clean and sanitary?

- | | |
|-----------------|----|
| Sometimes | 01 |
| Always | 02 |
| Never | 03 |

47. Is the small grocery store you usually food shop at clean and sanitary?

- | | |
|-----------------|----|
| Sometimes | 01 |
| Always | 02 |
| Never | 03 |

48. Is your neighborhood store where you usually food shop clean and sanitary?

Sometimes	01
Always	02
Never	03

49. Are you able to use your EBT Card at your local farmer's market?

Sometimes	01
Always	02
Never	03

50. Are you able to use your EBT Card at your neighborhood store?

Sometimes	01
Always	02
Never	03

51. About how many times a month do you use your EBT Card?

List actual number _____

52. Compared to other public offices with which you have contact, how would you rate the treatment you received at the EBT office? Would you say you were treated better, the same, or worse than you were treated at other public places such as the voter registration office, WIC, the post office, or the unemployment office?

Better	01
The Same	02
Worse	03
Don't know	08
Refused	09

53. Did you receive training on the use of the EBT Card?

Yes	01
No	02

54. How satisfied were you with the EBT training that you received?

Very satisfied	01
Satisfied	02
Unsure	03
Dissatisfied	04
Very Dissatisfied	05

55. Once you completed your training on the EBT Card, were you afraid to use it?

Yes	01
No	02
Sometimes	03

56. Now that you have used it for some time, are you still sometimes afraid to use your EBT card?

Yes	01
No	02
Sometimes	03

57. Were you ever embarrassed to use or hide the fact that you received food assistance by using the EBT Card?

Yes	01
No	02
Sometimes.....	03

58. Now that you use the EBT Card, do you feel embarrassed when you use it?

Yes	01
No	02
Sometimes	03

59. Have you ever avoided telling people that you use an EBT Card?

Yes	01
No	02
Sometimes	03

60. Do you ever go out of your way to shop at a store where no one knows you?

Yes	01
No	02
Sometimes	03

61. Have you ever been treated disrespectfully when you use your EBT Card?

Yes	01
No	02
Sometimes	03

61A. ***IF YES ----- By Whom?***

Store clerk or cashier	01
Bagger/Stocker	02
Manager	03
Other Shopper	04
Other (List) _____	

62. Were you ever treated disrespectfully when you told people that you receive food assistance through the EBT program?

Yes	01
No	02
Sometimes	03

63. Did you feel that people would treat you disrespectfully when you used the EBT Card?

Yes	01
No	02
Sometimes	03

Section III: Food Security

64. These next questions are about the food eaten in your household. Which of the following statements best describes the amount of food eaten in your household—enough food to eat, sometimes not enough to eat, or often not enough to eat?

- [1] Enough food to eat
- [2] Sometimes not enough to eat
- [3] Often not enough to eat
- [8] DON'T KNOW
- [9] REFUSED

65. Do you have enough of the kinds of food you want to eat, or do you have enough but not always the kinds of food you want to eat?

- [1] ENOUGH OF THE KINDS YOU WANT
- [2] ENOUGH BUT NOT ALWAYS THE KINDS YOU WANT
- [3] NOT ENOUGH TO EAT
- [8] DON'T KNOW
- [9] REFUSED

66. What are some reasons you don't always have enough to eat. Please tell me the reason why you don't always have enough to eat.

67. People do different things when they are running out of money for food in order to make their food or their food money go further. In the last 12 months, did you ever run short of money and try to make your food or your food money go further?

- [1] YES
- [2] NO
- [8] DON'T KNOW
- [9] REFUSED

68. In the last 12 months, did you ever run out of the foods that you needed to make a meal and didn't have money to get more?

- [1] YES
- [2] NO
- [8] DON'T KNOW
- [9] REFUSED

69. Did this ever happen in the last 30 days?

[1] YES [2] NO [8] DON'T KNOW [9] REFUSED

70. In the last 12 months, did you ever get food or borrow money for food from friends or relatives?

[1] YES [2] NO [8] DON'T KNOW [9] REFUSED

71. Did this ever happen in the last 30 days?

[1] YES [2] NO [8] DON'T KNOW [9] REFUSED

72. In the last 12 months, did you ever send or take your child/children to the home of friends or relatives for a meal because you were running out of food?

[1] YES [2] NO [8] DON'T KNOW [9] REFUSED

73. Did this ever happen in the last 30 days?

[1] YES [2] NO [8] DON'T KNOW [9] REFUSED

74. In the last 12 months, did you ever serve only a few kinds of foods—like rice, beans, macaroni products, bread or potatoes—for several days in a row because you couldn't afford anything else?

[1] YES [2] NO [8] DON'T KNOW [9] REFUSED

75. Did this ever happen in the last 30 days?

[1] YES [2] NO [8] DON'T KNOW [9] REFUSED

76. In the last 12 months, did you ever put off paying a bill so that you would have money to buy food?

[1] YES [2] NO [8] DON'T KNOW [9] REFUSED

76. In the last 12 months, did you ever get emergency food from a church, a food pantry, or food bank?

[1] YES [2] NO [8] DON'T KNOW [9] REFUSED

APPENDIX B

An Analysis Of the Psycho-Sociological Impact Of Electronic Benefits Transfer (EBT) Among South Carolina's Rural Recipients

1997 INTERVIEWER'S TRAINING MANUAL

**Food and Consumer Service Division
United States Department Of Agriculture
And
1890 Research Program
South Carolina State University
Orangeburg, South Carolina**

THEORETICAL AND PRACTICAL PROCEDURES FOR INTERVIEWING

This section is designed to substantially increase the skills of interviewers, thereby, enhancing the probability of a positive interview encounter. The variables or elements critical to a successful interview are described, and specific interviewing suggestions are provided.

A. Functions of the Interview

Bingham and Moore describe the interview as having one or all of three main functions. These functions are: 1) securing information from people, 2) giving information to them, and 3) influencing their behavior in certain ways. The function of the Electronic Benefits Transfer (EBT) interview to secure information from food stamp recipients focusing on their perceptions, attitudes and the impact on their quality of life regarding food stamps.

B. Establishing the Relationship

The interviewer must be concerned with making his/her interviewing as reliable as possible for securing dependable, valid data. He/she should have the proper attitude toward the person being interviewed. That is, the ideal relationship is one of mutual confidence and respect.

Interviewing techniques often must be adjusted to the needs of the respondent. In order to adjust the interview technique to the needs of the individual being interviewed, it is essential that estimates about his/her personality be made continuously. The interviewer must make judgements about the quality of the relationship, how the interviewer feels about certain topics, how

he/she reacts to a variety of questions, and whether he/she is being frank or defensive. The interviewer ordinarily makes his/her own judgements at the same time, for the interview is a give and take process in which the interviewer also learns a good deal about the interviewee. The key work is “relationship”. The interviewer and the interviewee both bring into the interview their own characteristics, their own life histories, and their own personalities.

C. Observation

Observation is a process operative in an interview from its inception to its close. The interviewer does not observe in the scientific sense of observing and noting phenomena in controlled experiments. Because he/she works with a human being in a fluid situation, his/her observation consists-of noticing what he/she sees, hears, and apprehends in the interview.

The trained observer senses many details and sifts out those irrelevant to the interviewing situation. According to Fenalson, every interview has its nonverbal accompaniment of emotional factors shown by variations in facial expressions, movements of the body, muscular tensions, changes in volume and quality of voice, volubility, or silence. At each stage in every interview, the interviewer is constantly making assumptions. These are subject to change as the interviewer develops new insight and understanding of the interviewee and himself in their interrelationship.

D. Utilization of the Interview Setting

An interviewer's skill is often evidenced in the way he/she uses the setting of the interview. Although not always thought of as such, the conscious employment of setting to further the purpose of the interview is a process. For example, when doing household interviewing, try to be inside the house before getting into the interview, and try not to ask questions which can lead to a negative response. Since the interviewer can manipulate the household interview exactly to his/her preference, it is still important for the interviewer to establish somewhere in the house where a private interview can be conducted. Some suggested phrases for obtaining the proper privacy may be:

“Could we go into another room so we won't interfere with other activities?”

“If your friend will excuse us, maybe we could go into another room? The interview will go much faster and you could return shortly.”

“I think you would prefer to answer some of these questions privately. Could we go into another room?”

The keynotes of effective setting are the sense that the interviewer's time is dedicated exclusively to the interviewee, that his/her leisure adequately encompasses the purposes of the interview, and that privacy and freedom from interruptions are essential to its success.

E. Listening

One of the most important skills an interviewer should possess is the art of listening and recording exactly what the respondent says. An interviewer should not interrupt, but at the same time must be able to tactfully conclude a conversation if the respondent gets sidetracked. A common error of an inexperienced interviewer is to be embarrassed by silences and to feel he/she must fill them with questions or comments. It is important, however, to remember that sometimes, a silence is due to other causes and if allowed to continue, will only embarrass the person interviewed. In such cases a pertinent remark or question will encourage the respondent to continue.

The interviewer should help the respondent feel at ease and ready to talk. The interviewer must also be at ease. Further research indicates the interviewee should be allowed to get accustomed to the interview situation. The interviewee should feel his/her ideas are important and that the interviewer is interested in hearing them. The interviewee should talk freely with as little prodding from the interviewer as possible. It is essential that the respondent feels free to express his/her own ideas.

F. Appearance

One factor often overlooked is the importance of appearance in an interview situation. Dressing in the rural setting tends to be conservative. The way one is dressed will determine how he/she is received. Moderation in dress, therefore, is mandatory.

G. Use of Community Knowledgeables

Research has proven that acceptance of interviewers into rural settings is aided by the use of key people in the community (e.g. ministers, public officials, and school principals, etc.). The interviewer will meet with the people who will assist them in locating eligible families for the research project.

The aid of such key individuals is important. The knowledgeable can help smooth the acceptance of interviewers by publicizing the research project prior to the actual interviewing date. The people help prepare potential respondents to overcome suspicions in addition to helping locate specific families.

Knowledgeables also may assist interviewers in specifying certain areas, where the interviewer may be particularly interested in conversing. The knowledgeables in the community also provide necessary information pertaining to life styles, attitudes, and expectations of the families indigenous to the community. The individuals may aid in the selection of interviewers from their particular county.

H. Dealing With Problem Situations

Situations sometimes occur which require specific strategies to ensure a desirable outcome. A few of the most common difficulties are delineated below.

1. ***Handling Refusals.*** Occasionally, individuals will refuse to be interviewed or answer a particular question. However, most individuals are friendly and willing to cooperate. If a person does initially refuse, explain that his/ her participation is necessary in order to get an accurate picture of the people

his/ her participation is necessary in order to get an accurate picture of the people being studied. If we lose the information from those who are too busy, or those who cannot be bothered, we will not have a complete picture of the population.

Do not allow a refusal to influence your attitude. Nothing will bring on a refusal faster than an apologetic approach. It is important to meet the respondent with a friendly, confident, and positive manner. A refusal can be quite upsetting, but if it happens, pull yourself together and get back into stride. Never “talk down” to anyone. Just as an apologetic approach often produces negative results, a condescending attitude also can create refusals.

When you encounter an eligible respondent who you sense is reluctant to participate but who just can't say “No,” don't make an appointment to conduct the interview at a later date. Such a person will frequently refuse by failing to keep the appointment. Suggest that he/she try a few of the questions and then decide whether or not he/she would like to continue. However, do not treat a delay or postponement in completing the interview as a refusal. Answers such as “I don't have time” or “I have to run an errand” or “I have guests,” etc., are usually not refusals. In these cases, make arrangements to return at a more convenient time.

Another problem sometimes encountered is refusal to answer a particular question. Once it is clear that the individual chooses not to answer a specific item, the interviewer should respect the interviewees' right to refuse.

A refusal is not necessarily a reflection on one's ability as an interviewer. The best interviewers experience an occasional refusal. On the other hand, one

of the marks of a good interviewer is a low refusal rate. The approaches/suggestions made herein should help deal with the problem of refusals should they arise.

2. *Insuring an Unbiased Interview.* Key elements in this process are: neutrality, order, precision in administering the instrument, and appropriate probing. The interviewer should say nothing to affect responses; show no surprise relative to comments, responses or appearance of the respondent. It is important to gain the respondent's confidence. The absence of neutrality inhibits this process.

All questions should be asked exactly as worded on the instrument and in the same order as they appear. Even seemingly repetitious questions should not be skipped over. Remember, written instructions will always indicate questions that should be skipped. However, if the respondent gets annoyed, reply with something like:

“I didn’t know whether you would have other things to say on the subject.”

“I have to make sure that I had your full answer to that.”

“You may have already told me this, but let me confirm it.”

Appropriate use of probing is particularly important. For example, a “Don’t Know,” should never be accepted without further probing. Oftentimes, a respondent will say “I don’t know” because:

—he/she doesn't understand the question and said “don't know” to avoid saying he/she doesn't understand;

- he/she is thinking the question over, and says “don't know” to fill the silence and give himself/herself time to think;
- he/she may be trying to evade the issue because he/she feels he/she is uninformed, may give the wrong answer, or because the question strikes him/her as too personal or
- he/she may really not know or really may have no opinion on the question.

The respondent must use his/her judgement to decide which of the above may be the case. One should sit quietly—but expectantly—and the respondent will usually think of something further to say. Silence and waiting are frequently your best probes for a “don't know.” You'll also find that other useful probes are: “Well, what do you think?”, “I just want your own ideas on that.”, “Nobody really knows, I suppose, but what's your opinion?”

Always try at least once to obtain a reply to a “don't know” answer before accepting it as final. But be-careful not to antagonize the respondent or force an answer. Remember—the respondent has the right to refuse to answer any question he/she chooses.

Neutral probes may be effectively used for the desired response. Probe for the following:

- a) To make clear exactly what respondent has in mind.
- b) To be sure answer is relevant—really in answer to the question.
- c) To fit answer to specified responses.

Don't try to sum up in your own words what someone has said—ask him/her to be more specific or re-ask the question. For example, you might ask, "Could you explain that more?" It is not always necessary to use an actual question to follow-up an initial answer that is unsatisfactory. Sometimes mere silence can be very effective. If the respondent gives an incomplete answer, you just look at him/her expectantly, this alone is often the best way to encourage him/her to continue. Similarly, the small conversational fillers that you use in ordinary conversation will often be effective, such as the phrases: "I see," or "Uh-huh," or "That's interesting", or "Tell me more about that."

3. *Discouraging Irrelevancies.* Respondents will sometimes miss the point of the question. Many times they will give responses which seem to answer the question but, as you can see when you look further, are not to the point of the question and are, therefore, irrelevant.

It is easy to be "taken in" by a respondent who is talkative and gives a full and detailed response—a response which, however, is quite beside the point. It is not the answer to the question asked.

In most cases, a respondent gives an irrelevant response because he/she has missed an important word or phrase in the question. It may, therefore, be necessary to interrupt the respondent and repeat what you want to know to bring him/her back to the point. Do not antagonize the respondent, but keep in mind the need for an unbiased, accurate response.

In some instances, the respondent may not understand a particular word or words in a question. Unless a definition has been provided the interviewee, the standard response should be, "whatever it means to you."

Irrelevancies must be thoughtfully discouraged. Answers to specific questions are needed. Thus, the interviewer should deliberately and carefully proceed with the questionnaire, making sure the respondent understands the questions and responds accordingly.

I. Final Thoughts for Interviewers

An interviewer should:

1. Be articulate and have a pleasing personality.
2. Portray interest in people.
3. Be reliable.
4. Be able to ask questions without interjecting personal bias.
5. Be physically fit and alert.
6. Be able to interpret terminology.
7. Be able to clearly follow directions.
8. Complete **all** materials neatly and legibly to facilitate coding.
9. Be courteous and professional at all times.
10. Be able to maintain confidentiality.

Proficiency in interviewing is dependent on developing good human relations skills evidenced in habits, techniques and attitudes of the interviewer. Training, practice, and some trial and error will almost always yield the desired results.

APPENDIX C

SOUTH CAROLINA DEPARTMENT OF SOCIAL SERVICES

Family Independence/Food Stamp Recipient's Consent/Refusal for the Release of Confidential Information

Name: _____ Case No.: _____

Street Address: _____

City: _____ State: _____ ZIP: _____ Phone No.: _____

RELEASE MY NAME: I grant permission to the South Carolina Department of Social Services to release my name, address, telephone number and the fact that I am a Family Independence (AFDC) and/or Food Stamp recipient to organizations that desire to help me and/or my family with services or in kind assistance which may assist me and/or my family to become independent and self-sufficient.

I understand my name, address and telephone number may be released to organizations such as: churches, synagogues, mosques, civic organizations, fraternal organizations, mentorship groups, churches and/or church sponsored organizations. I understand that this list is not all inclusive and I authorize the Department of Social Services to decide which organization(s) will receive my name, address and telephone number.

I understand that whether I consent or refuse to consent to the release of this information does not affect my eligibility to participate in the Family Independence and/or Food Stamp Programs.

I understand that in granting this consent I release the Department of Social Services and its employees from any responsibility or liability for the actions that may take place between me and/or my family and the organization(s) to whom my name was released, resulting from release of my name to the organization(s).

I understand that I may cancel this consent at any time by notifying the local Department of Social Services in writing of that fact. The cancellation will become effective no later than 60 days after it is received.

Recipient's Signature: _____ Date: _____

DO NOT RELEASE MY NAME: I have read the information above, and I do not want the Department of Social Services to release my name to any of the above types of organizations.

Recipient's Signature: _____ Date: _____

APPENDIX D

April 16, 1997

Sheriff James "Poppa" Johnson
1311 Ellis Ave.
c/o The Law Complex
Orangeburg, S. C. 29115

Dear Sheriff Johnson:

This communiqué is written to inform your office of the Research Project entitled "An Analysis of the Psycho-Sociological Impact of Electronic Benefits Transfer (EBT) Among South Carolina's Rural Recipients," which will be commencing the week of April 27, 1997. The "EBT" project is a federally funded grant from the Food and Consumer Service Division of USDA. The overall objective of the project is to determine the psycho-sociological impact of EBT on the quality of life of the clientele. A random selected sample of 500 households will be interviewed throughout Orangeburg County.

It is our intent to make you aware of the research being conducted in your county in the event that some residents should call to notify or question the authenticity of the individuals conducting the surveys. The trained interviewers (paraprofessionals) who will be administering the surveys are _____, _____ and _____. The aforementioned individuals are local residents and/or familiar with the area being surveyed.

Your cooperation regarding the aforementioned endeavor is greatly appreciated. If you have a need for further clarification, I can be reached by calling (803) 536-7189 Monday-Friday from 8:30 a.m. to 5:00 p.m. or by writing P.O. Box 7325, 300 College Street N.E., Orangeburg, S.C. 29117-0001. Thanking you in advance, I am.

Sincerely,



Robert L. Phillips, Jr.
Senior Research Scientist

**TRADITIONS OF SELF SUFFICIENCY IN THE AFRICAN-
AMERICAN COMMUNITY¹**

BY

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DELAWARE STATE UNIVERSITY
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¹Grant Agreement Number 59-3198-5-061

I. Introduction

On December 28, 1993, the New York Times reported that the Archdiocese of Hartford (Connecticut) had refused to allow a church in downtown Hartford to open a soup kitchen because it would hurt the church's image and downtown development (1). The Monsignor stated that the solution to poverty was to take care of businesses so that they could provide jobs; the solution to poverty was to put everybody to work.

Father Sirico, a Washington, D. C. based priest, wrote briefly about the Samaritan's dilemma (2): the paradox of the Christian call to feed the hungry and the moral responsibility of the human agent to be independent and self sufficient if possible. He wrote, "The expectation of charity can lead people to behave in ways that keep them in poverty; their breaking free sometimes requires our withholding help".

Providing food and other assistance to the poor is deeply rooted in America's Judeo-Christian heritage. As evidenced by donations to charities, food pantries, and strong public support for school feeding programs, Americans are quite willing to help those in need, especially children. However, concern that charity and social welfare programs may promote dependency and a growing budget deficit has led to a rancorous public debate about self sufficiency, personal responsibility, and the causes of poverty. The two stories above exemplify the dilemma that even religious institutions experience over how to best meet the immediate and long term needs of the poor. Public exhaustion with aggressive panhandlers, the specter of long lines of apparently able bodied men lined up at soup kitchens, and anecdotal reports of fraud and abuse in social welfare programs, including the Food Stamp Program (FSP), have given rise to the perception that social welfare programs are populated by individuals who have become dependent on public and private giving. Since African Americans are disproportionately enrolled in public assistance programs, the debate has been colored by matters of race. Public frustration over this issue was crystallized in the passage of the welfare reform legislation recently signed by President Clinton.

Public and private debate on the issues of personal responsibility and self sufficiency focus on a recurring question: how does an affluent nation like the United States, honor its moral

imperative to help the least of its citizens, without destroying the ethics of work, self sufficiency, and personal responsibility upon which the nation was founded and values? Indeed, the ethics of personal responsibility, individual initiative, and a commitment to continuous self development are now viewed as essential to success in the post industrial global society.

The goals of this research project were to explore historical and contemporary attitudes and perceptions regarding personal responsibility and self sufficiency in African American communities and to examine how such attitudes may impact Food Stamp Program participation and effectiveness. Andrew Billingsley, the noted African American sociologist stated that a community cannot be judged accurately alone by its weaknesses; the strengths of a community must be assessed as well (3). According to Billingsley, it is from the strengths of a community that policies and programs will evolve for solving community problems.

This research began before the passage of the welfare reform bill. The passage of that bill, as well as the increasingly fiscally conservative mode of the country, makes the research questions even more imperative.

III. Research Objectives

The objectives of this project were to:

- a. Describe the tradition and methods of achieving self sufficiency among African Americans
- b. Describe how values and normative expectations of self sufficiency and personal efficacy are communicated and reinforced by the major institutions and significant voices in African American communities
- c. Identify community and institutional strengths and traditions which may be incorporated into FSP programming

IV. Methods

This research project employed a combination of qualitative approaches to collect data. These approaches include: observations, structured interviews, focus groups, and review of literature.

The literature review included an examination of the major works regarding self sufficiency, the growth of entrepreneurship in the African American community during reconstruction, self help movements, the role of mutual aid societies, fraternal societies, sororities, vocational institutions, churches and church supported institutions. Thirty-two structured interviews were conducted with individuals and groups in 11 states who worked in religious or private, voluntary organizations with outreach to low income communities. The structured interviews contained only two questions: a) how is the notion of self sufficiency inculcated or promoted in the helping environment and b) what is the effect of welfare dependency on feelings of personal efficacy.

Although the structured interview form consisted of only two questions, the actual interview may have consisted on 10-15 questions and follow up questions as appropriate. Most

interviews were conducted over the telephone, however a few were in person. Usually the interview was completed in one call. Occasionally, it was necessary to make a follow up call to clarify points of discussion.

A cross section of groups and individuals, including religious groups, charitable organizations, and minority entrepreneurs were contacted to participate in the structured interview. Representatives from self help public advocacy groups were also contacted. The interview was usually conducted with the individual responsible for coordinating charitable outreach. In the case of the self help public advocacy groups, interviews were conducted with public information officers or the group spokesperson.

These groups were chosen locally and nationally for prominence. Smaller, less well known groups were also contacted. Occasionally during an interview, the interviewee would suggest another group or person to contact and these groups were added to the list of possible interviewees.

Two focus groups were held with groups of low income women recruited from public housing projects, parenting intervention programs, and a WIC program clinic. One focus group contained eight women and the second group contained seven women. The focus groups sessions were audio and video-taped. A team composed of a marketing communications specialist and a social worker reviewed the tapes. The principal investigator also reviewed the tapes. Recurring themes were extracted from the interviews with focus groups.

Literature Review:

The purpose of this review was to examine the traditions of self help and self sufficiency in the African American community. Self help, for the purpose of this review, is defined as attempts within a community to overcome economic and social problems, or an individual's attempts to make economic or social progress through business activities. The tradition of community organizing to overcome various obstacles is well established in the contemporary African American community. Therefore it is not surprising that the literature demonstrates that historically African Americans organized mutual aid societies, used churches, created church owned schools, and other benevolent societies to care for and assist each other. An important contemporary question is whether the traditional patterns of self help and small scale business activity can create income streams within the African American community sufficient to create significant employment opportunities.

Self help initiatives among African Americans began during slavery. Examples of this include former slaves pooling resources to purchase the freedom of enslaved family members. Slaves who were artisans or craftsmen were sometimes allowed to "work" for individuals other than their master to earn money which could be used to purchase their own freedom or that of their kin (5, 6, 7). A detailed discussion on this subject is available from Walker and Bell (see Bibliography).

In 1860, approximately 11% of the 4.5 million African Americans in the United States were free (6). Many of these individuals engaged in a variety of business enterprises, including merchandising, real estate, manufacturing, construction trades, transportation and extractive industries (6).

In Philadelphia around 1838, free African Americans were engaged in a variety of professions, skilled and semi skilled occupations (Table 1)¹. African Americans in Philadelphia

also ran entertainment businesses, catering operations, boarding houses and hotels.

African American women were engaged in occupations such as dressmaking, tailoring, and hairdressing. The hairdressing trade would prove to be a very lucrative route to self sufficiency. The first American self made female millionaire of any race was Madam C. J. Walker. An African American woman born into desperate poverty, Walker became wealthy by developing promenades and techniques for straightening or relaxing the curl in African hair (8). Starting with \$1.50 in capital in 1905, Madam C. J. Walker built a company which included a factory with 50 employees and a network 20,000 agents. At her death in 1919, her net worth was estimated to be \$2,000,000. Embodying the tradition of self help, Madam Walkers is quoted as saying, "I am not merely satisfied with making money for myself, for I am endeavoring to provide employment for hundreds of women of my race. (9)"

Madam C. J. Walker is an example of a entrepreneur who performed well in what is termed the "personal services" industry. Harris (5) has noted that African Americans performed well in this segment of business, because they essentially had no competition. Whites did not compete with African Americans in businesses such as hairdressing, barbering, boarding houses, and mortuary services. A. J. Gastson of Birmingham became a millionaire by the investment of a stable income generated from a mortuary service into real estate, a radio station, and banking. During a period when African Americans had great difficulty borrowing money in the organized capital markets, personal services businesses required less capital investments to start and operate (16).

Butler (4) has provided a comprehensive analysis of African American business activity in Durham, North Carolina and Tulsa, Oklahoma during the early 20th century. The author describes those African American communities as racial enclaves where a variety of African American owned businesses flourished because of the "structure of racial discrimination".

In the racial/ethnic enclave theory, businesses are successful largely due to trade and commerce within the enclave (the community where the racial/ethnic group is concentrated). Business transactions with the larger community were rare, and when it did exist was mediated a "middleman" (10). Durham and Tulsa were essentially enclave communities in Butler's conceptualization.

Harris' (5) analysis on the relative competitive advantage African Americans had in "personal service businesses" is similar to the currently described explanation of why niche marketing to immigrants by ethnic owned businesses are successful. It is also similar to the enclave theory described above. While the concept of niche marketing is not new, Fairlie (24) gives it a slightly different slant. In the author's conceptualization of niche marketing, immigrant businesses such as those run by Cubans, Koreans, Haitians, or Chinese are able to develop successful small business enterprises because they provide "unique services and products" to a immigrant community. The community does not necessarily have to live in a resident enclave, as previously described by the "enclave theory", but members might patronize well established business districts, such as Chinatown in Washington or New York to buy goods and services. Table 2 shows examples of niche good and services provided to a fairly new, not well assimilated immigrant community, or to a community holding on to core traditional cultural values. In Fairlie's model, these business have a competitive advantage over business operated by American borne ethnic or racial minorities such as native born Hispanics or African Americans because they offer unique goods and services.

In his work, Entrepreneurship and Self Help Among Black Americans, Butler discussed the sociology of entrepreneurship and compared self help and business activities among ethnic and racial minorities in the United States. His concluded that while self help was a feature of the African community from slavery to the present, racial discrimination and segregation mitigated

against the full economic development of the African American community. He compared the impact of self help initiatives among Asian and ethnic European immigrants. He found that unlike African American communities, these groups benefitted greatly from the freedom to develop businesses within and outside of the community. Moreover, the economic development of African Americans was limited by laws limiting or abridging legal rights and remedies. However, Butler notes that even in the face of determined resistance, African American entrepreneurs achieved success against the odds.

The story of African American economic development in Tulsa is a case study of the sometimes violent opposition to black entrepreneurship (11, 12). African Americans who were shut off from opportunities to buy and sell in the main business district of Tulsa, started their own businesses in a black section of Tulsa called Greenwood or sometimes "Little Africa". Table 3² shows some of the businesses which operated in the bustling business district: An ill fated encounter between an African American delivery person and a young white woman in a Tulsa elevator in 1921 precipitated a white rampage in Greenwood which destroyed more than 18000 homes and businesses and resulted in the death of more than 300 people, mostly African Americans. By 1925 many of the businesses had been rebuilt despite an array of legal impediments. But by the 1970's, the bustling Greenwood area has been effectively destroyed by urban renewal projects and increased trade between African Americans and the outside community. Urban renewal projects, including the construction of interstate highways, have been cited in the decline of African American business districts and neighborhoods (17) in many cities, including Miami's Liberty City area, Durham's Hayti, and Columbus, Georgia's Kinfolk's Corner. In Durham, Hayti was divided by Highway 145. The demise of the thriving business activity of Miami's Liberty City was hastened by the construction of Interstate 95 right through the middle of the community. In Columbus, Georgia, urban renewal and gentrification along the river front

led to the removal of African American owned grocery stores, barber shops, bars, and night clubs.

Role of Churches, Fraternal Groups, Mutual Aid Societies, Banking and Insurance Companies

Perhaps no better illustration of African American self help can be provided than a consideration of how African American mutual aid societies, banks, and insurance companies organized to acquire capital when other options for capital formation were closed.

Because of the central role of religion in the African American community, the church has always played a key organizing role in self help activities. The community's faith in the spiritual leadership of the pastor was transfigured into faith in the minister's financial leadership as well. Churches served as a source of support for families and individuals in crisis. Churches and church conferences also contributed to the community by starting and operating secondary and post secondary schools across the south. Interestingly, many of the private and public African American universities were started by small black churches or church conferences in the south.

African Americans organized and operated mutual aid organizations, fraternal societies, and other efforts to pool resources for times of emergencies. These groups were forerunners to African American insurance companies, some of which remain in operation today. African American churches collected funds to help runaway slaves settle in the free north, to help support the abolitionist movement, to feed and care for indigent freed slaves, and capital to found and operate schools for former slaves and their children (4). Wilberforce University was the first college founded by African Americans. It was started by the merger of a Seminary operated by the African Methodist Episcopal Church and a college operated by the Methodist Episcopal Church.

From Los Angeles to New York, African American churches have once again asserted leadership in community economic development. The literature is replete with examples. A

large church in Durham, North Carolina buys and rehabilitates dilapidated houses and rents or sells them to members and others in need of affordable, decent housing. An African American church in New Jersey has developed a strip shopping mall with the only supermarket in a predominately minority neighborhood in the city. A large church in Baltimore operates a book publishing operation to subsidize its outreach to the community. In Creedmoor, North Carolina and Columbus, Georgia, African-American churches developed housing for low income seniors. Many African American churches now operate church schools for members and others seeking alternatives to violent, nearly non functional public schools.

Increasingly, African American churches operate financial planning classes designed to help members better manage their resources and avoid consumer debts. A large African American church in Temple Hills, Maryland has hired a financial counselor to help members avoid and manage credit problems. Avoiding debt is viewed as a spiritual responsibility, but the secular advantages are clear.

This rebirth in community self help led by the church has parallel movements among political organizations and advocacy groups. In July 1995, representatives from 1890 Land Grant Institutions and community development organizations met for a conference entitled "Building Sustainable Rural Communities: The 1890s and Community Partnerships". The goal of this partnership is to promote community development in the southeast part of the United States. This partnership will include a focus on the development of the information technology infrastructure needed to transact business in the twenty-first century.

In addition to the African American church, mutual aid societies were also involved in the self help movement. Some mutual aid societies formed within churches and some were community based. Mutual Aid societies were formed when African Americans agreed to contribute a small sum a money on a weekly or monthly basis for sickness and death benefits.

Table 4. shows a list of Beneficial Societies operating in Atlanta and Petersburg Virginia. These beneficial societies were the embryonic form of many African American insurance companies, including some in operation today. The mutual societies, savings clubs, and fraternal societies also evolved in to depository institutions (banks).

In 1931 there were 36 African American owned insurance companies (Table 5). In 1997, according to the National Insurance Association, an organization of African American owned insurance companies, there are only 13 African American insurance companies (13). In 1947 there were 211 members of the National Insurance Association. Ironically, it appears that when African Americans faced some of the most significant institutional and social barriers to business formation, the community actually registered more business activity. The example from the insurance industry is mirrored in the banking industry as well. For example, between 1888 to 1934, approximately 134 African-American banks were founded (5), some of which remain in operation today. The Mechanics and Farmers Bank in Durham, North Carolina is an example. However, in 1992 and 1995 there were only 51 and 36 banks, respectively, which were owned and operated by African Americans (14, 15).

Limits on Entrepreneurism

In the early 20th century, African American business formation and expansion was limited by potential markets and capital. Those problems still exist today. Although African Americans, operating under the enclave theory, could sell goods and services to other African Americans, the business opportunities were limited because African Americans customers did not have resources to support the businesses. Interracial commerce did exist in some communities, but on a rather limited scale. In the 21st century there will be new challenges to the formation and expansion of businesses. The impact of technology on the viability of traditional methods of self help has not been explored. However, this is an important topic. In a global economy and a

deindustrialized America, can individuals and communities achieve economic self sufficiency using the old ways? Can small scale entrepreneurial business activities survive global competition and corporate mergers. Borjas and Bronars noted that the ablest white Americans enter self employment while those with the least skills go into the salaried sector. The opposite is true for African Americans: the ablest, most talented individuals seek salaried employment (18). The highly competitive business environment of the 21st century will require talent, skill, and education.

As was observed in the case of Tulsa, when given an opportunity to shop outside of the racial enclave, African Americans do so. When resources are limited, individuals may choose to trade with a corporate giant such as Wal-Mart to benefit for lower prices the chain can offer due to volume buying and sheer market domination.

In 1992, approximately 94% of all African American firm operated as sole proprietorships (13). The average receipts per firm was \$52,000 compared to \$193,000 for white owned firms. Fifty-six percent of all African American firms had receipts of less than \$10,000. Two thirds of the businesses were retail or service. Clearly, many of these businesses are not well suited to endure vicissitudes of a changing business environment or consumer driven recessions. It also appears that these businesses are not positioned to offer employment to a significant number of unemployed African Americans. Table 6 shows the self employment rates for ethnic/racial groups in the United States. As shown, only two other ethnic groups have lower self employment rates than African Americans.

Billingsley noted that self help efforts in the African-American community must include individual initiatives, institutional efforts, and business ownership to offer economic stability. Fairlie (24) believes that low rates of self employment among African Americans is a serious policy issue for the country. The perception of limited economic opportunities for African

Americans and preferential treatment of other minorities has been linked to unrest in some communities (Los Angeles for example) (21).

Individual initiatives include the private efforts of individuals to help in their own communities. Institutional efforts to promote self help are reflected in the important work African American churches are doing across the country. The continued efforts of African-American colleges and universities, financial institutions are also important.

There is disagreement within and without the African American community about the role of government in helping African American communities become self sufficient. For example, The National Center for Neighborhood Enterprises headed by Robert Woodson takes the position that efforts to assist low income families should devolve from the federal government to local community based organizations (19). Government intervention would be restricted to efforts such as setting favorable tax incentives, removing regulatory barriers, and passing legislation which emphasizes personal responsibility. This debate is reminiscent of the great debate between Booker T. Washington and W. E. B. DuBois early in the 20th century on the best way to secure the future of African-Americans (20).

Voices from the Field: Structured Interviews

To further explore the paradox cited by Sirico (2) structured interviews were used to explore how ideas about self sufficiency are communicated within the private, voluntary "helping" environment. Interviews were conducted with clergy and lay people from churches with outreach ministries to the homeless and poor, ministers and administrators of religious and secular community based outreach programs.

The structured interviews suggested that many providers experienced dissonance over how to best achieve the long term goal of promoting self sufficiency in the individuals they helped. In general, the ambivalence and confusion articulated by Sirico was evident in the comments and perceptions of the representatives of religious and charitable organizations. There was no firm answer on how to balance the goal of helping meet the immediate needs of the poor and with the long term goal of establishing self sufficiency. Representatives appeared to be truly conflicted on when to terminate support to clients. Although most organizations which provided direct material support indicated that they had time or financial limits on service or grants, they also indicated that they often made exceptions on a case by case basis. Among all the individuals interviewed, there was no clear answer on when assistance should be ended. Representatives stated that they tended to favor termination when individuals appeared not to be trying to make progress. Assessing an individual's commitment to improvement was a judgement call on the part of the staff.

One theme that did emerge from the interviews was the idea of mutual effort and reciprocity. Virtually each of the representatives interviewed expressed the idea that the individual receiving assistance should "bring some effort" to the table as their expression of commitment to self improvement. This could be demonstrated by making an effort to find a job, participating in counseling sessions, taking advantage of training opportunities, or maintaining

sobriety. Some groups demanded labor in trade for housing or food. Requiring work for benefits, a prominent feature of the new welfare reform bill, is thought to develop work habits, instill a sense of responsibility, and reduce the "entitlement mentality".

While some interviewees agreed that a sense of entitlement and dependency had developed in some individuals, the majority of the interviewees disagreed that "most" social service recipients fell into that category. Indeed, there seemed to be a genuine feeling that the opposite was true. This perception is important and will be discussed later.

There was disagreement on the origins of the dependency. Because the sample included individuals working to help low income individuals, there appeared to be a bias towards a more sympathetic view of recipients. Among indigent males, drugs and alcohol abuse were seen as the primary reason for the dependency. Representatives working with women tended to see depression, loss of self esteem, and abuse (physical and sexual) as leading to loss of feelings of personal efficacy. Limited education and job skills, single parenting, substance abuse, and emotional problems contributed to chronic poverty. Substance abuse intervention and intensive individualized counseling were seen as a part of the effort to empower the individual. Lack of funding was reported as limiting the ability to offer this type of service. However, it was clear from every representative that even empowered individuals needed a skill set that would allow them to earn a decent wage.

Wilma Mankiller is a powerful voice from the Native American community. She stated that social welfare workers would be surprised to learn that when given an opportunity, low income individuals are effective in developing solutions for their own problems (22). Resident managed public housing is cited as an example of how empowered poor individuals can transform their own communities.

In discussions with a representative from a group which has as its mission, developing the self help capacity in low income communities, frustration with traditional social welfare programs and social welfare professionals was evident. Social welfare professionals, with entrenched self interests in maintaining the current social welfare infrastructure were viewed as part of the problem. This frustration is expressed quite vividly in the work of Funicello (23), The Tyranny of Kindness. Social welfare professionals, though seen as well meaning, are perceived as middle class beneficiaries of funding aimed at poor people. As beneficiaries of social welfare programs, they are often perceived as having an entrenched interest in maintaining the status quo.

There is widespread belief among many, including members of Congress, that a great deal of money has been wasted on social welfare programs. There is a simultaneous demand to limit funding on social welfare program and devolve control of these programs back to the states. At the state level, small community based initiatives are by some as preferable to large, bureaucratic structures.

Among the interviews completed before the passage of the welfare reform bill, there was recognition of the fact that significant changes in social welfare programs was imminent. The welfare reform legislation changed the terms of the debate. The debate is no longer if social welfare programs promote dependency and rob individuals of personal efficacy. The central challenge is now to find ways to help individuals impacted by changes in social welfare programming. Helping individuals find their own voice, tapping into community strengths, and organizing community self help initiatives is now more important than ever.

Focus Group

The themes extracted from focus group tapes are similar to those reported from other work with low income women.

Important themes gleaned from the focus group tapes were:

1. Recognition by current and former beneficiaries of social welfare programs that they were held in low regard by the public
2. A strong challenge to the widespread belief that welfare recipients enjoy being on welfare
3. Frustration at the minimal levels of support
4. Frustration that no transitional support is offered (a provision that a recipient could keep some welfare support for 2-3 months after beginning a job)
5. The need to retain medical insurance as part of the transition
6. The need to be tough on individuals who abuse welfare benefits, including those who sell or trade food stamps
7. Requirements that children be sent to school as a condition for receiving benefits
8. Stronger enforcement of child abuse laws
9. Recognition that a minimum amount of financial abuse will occur among individuals determined to abuse the system; do not label and treat all beneficiaries as abusers because of the action of a few individuals
10. Concern about the future of their children; desire to create better lives for their own children
11. A desire for training to help individuals upgrade skills and find a job
12. The need for safe, affordable, decent housing

Conclusions and Policy Implications

The African American community has a tradition of self sufficiency which dates back to the days of slavery when family members managed to acquire funds to buy the freedom of loved ones. The tradition of self sufficiency and resiliency continues today. The key question is how to harness that tradition to generate business activity and economic stability in the African American community.

The over arching theme from the review of the literature and the structured interviews with community outreach workers is that the solution to the problems facing low income communities must originate from within the community. Even more specifically, they should originate from the impacted individuals themselves. This requires a fundamental rethinking of the social welfare approach to problem solving in which solutions are imposed from the outside.

Butler, as well as ministers and leaders of community outreach organizations, see self help and increased entrepreneurial business activity as essential to eliminating poverty among African Americans. Butler and others have noted that increased business activity translates into an emphasis on education, thrift, investment, the generational transfer of wealth, and community pride. These traits have served other ethnic and racial minorities in the United States well, helping them to secure some level of economic self sufficiency.

The role of the church in promoting self help has been documented. The church or faith based organizations will play a pivotal role in the spiritual renewal essential to a reduction of negative, self destructive behaviors, including crime and violence exacerbate the problem of persistent poverty in the African American community. But as was suggested by Butler (4), perhaps the research focus needs to shift from what has failed to what has worked. According to Butler, there should be a moratorium on research on the problems experienced by poor individuals. Instead, research should focus on what has been successful in low income

communities, including immigrant Asian and West Indian communities. This position supports the stance taken by Billingsley (3): the answer to problems facing poor communities will be found in their strengths or successes, not their weaknesses.

REFERENCES

1. "Archdiocese Rejects Hartford Soup Kitchen", New York Times, December 28, 1993.
2. Sirico, R. "Samaritan Dilemma", Fortune, April 25, 1994.
3. Billingsley, A. Climbing Jacob's Ladder, Simon and Schuster, New York, 1992.
4. Butler, J. Entrepreneurship and Self-Help Among Black Americans, State University Press of New York: Albany, New York, 1991.
5. Harris, A. The Negro As Capitalist, Amo Press, New York, 1936.
6. Walker, J. Racism, Slavery and Free Enterprise: Black Entrepreneurship in the United States Before the Civil War. Business History Review 60: 333.
7. Franklin, J. H. From Slavery to Freedom. Negro Business and Business Education. Harper and Brothers Publishers: New York, 1947.
8. Bundles, A. P. Madam C. J. Walker, Chelsea House Publishers: New York, 1991.
9. Bundles, A. P. Forthcoming Biography of Madam C. J. Walker, 1997 Scribners Press.
10. Bonacich, E. (1972). A Theory of Middleman Minorities. American Sociological Review 38: 583-594.
11. Butler, J. S. and Wilson, K. (1990). Entrepreneurial Enclaves in the African American Experience. Neighborhood Policy Institute, Washington, DC
12. Ellsworth, S. Death In a Promised Land, Louisiana State University Press: Baton Rouge, LA, 1982.
13. Personal Communication, National Insurance Association, Chicago, Illinois. March 1997.
14. U. S. Census, Population Reports, February 1996.
15. Creative Investment Research, Washington, DC, April 1996.
16. Drake, St. Clair and Cayton, H. "Negro Business: Myths and Facts" in Black Metropolis, Harcourt Brace and Co: New York, 1945, pp. 430-469.
17. Silver, C. and Moeser, J. The Separate City: Black Communities in the Urban South, 1940-1968, University Press of Kentucky: Lexington, KY, 1995.
18. Borjas, G. and Bronars, S. (1989) Consumer Discrimination and Self Employment. J. of Political Economics. 97(3) 581-605.

19. Bridging the Gap: Strategies to Promote Self Sufficiency Among Low Income Americans. Recommendations of the Neighborhood Leadership Task Force on Grassroot Alternatives for Public Policy. Washington, DC, 1995.
20. DuBois, W. E. B., The Souls of Black Folks, New American Library, Inc., New New York, New York 1969
21. Wong, C., Black and Chinese Grocery Stores in Los Angeles' Black Ghetto, Urban Life 5(4): 439-464.
22. Mankiller, W., Opening Address. Annual Meeting of American Association of Family and Consumer Sciences, June 24, 1995, New Orleans, LA
23. Funicello, T. Tyranny of Kindness: Dismantling the Welfare System to End Poverty in America. New York: Atlantic Monthly, 1993.
24. Fairlie, R. Ethnic And Racial Entrepreneurship: A Study of Historical and Contemporary Differences. Garland: New York, 1996.

BIOGRAPHY

- Aldrich, H. and Roger Waldinger. (1990) Ethnicity and Entrepreneurship. Annual Review of Sociology 16(1): 111-135.
- Aronson, R., Self Employment: A Labor Market Perspective. ILR: Ithaca, New York, 1991.
- Bates, T. (1981). Black Entrepreneurship and Government Programs. Journal of Contemporary Studies 4(4): 59-69.
- Bates, T. Black Capitalism: A Quantitative Analysis. Praeger: New York, 1989.
- Bell W. K. A Business Primer for Negroes. W. K. Bell: New York, 1948.
- Berlin, I. Slaves Without Masters, Pantheon: New York, 1974.
- Blau, F. and David Graham (1990) Black-White Differences in Wealth and Asset Composition. Quarterly J. of Economics 105(2)321-339.
- Bonacich, E. (1973). A Theory of Middleman Minorities. American Sociological Review 38(5): 583-594.
- Boyd, R. (1990). Black and Asian Self Employment in Large Metropolitan Areas: A Comparative Analysis. Social Problems 36(20): 258-274.
- Boyd, W. K. The Story of Durham, Durham: Duke University Press, 1927.
- Butler, J. and Kenneth L. Wilson, Entrepreneurial Enclaves in the African American Experience, Washington, DC National Center for Neighborhood Enterprises, 1988.
- Douglass, C. B. The History of Tulsa, Oklahoma. Vol. 1, S. J. Clarke Publishing: Chicago, 1921.
- DuBois, W. E. B. The Philadelphia Negro. University of Pennsylvania Press: Philadelphia, PA., 1899.
- Dubois, W. E. B. Economic Cooperation Among Negro Americans Atlanta: Atlanta University Press, 1907.
- Farley, R. (1990) Blacks, Hispanics and White Ethnic Groups. American Economic Review. 80(2) 237-241.
- Frazier, E. F. The Negro in the United States. McMillan Publishing: New York, 1957.
- Kinzer, R. and Edward Sagarin, The Negro in American Business. Greenberg: New York, 1950.

- Light, I. Ethnic Enterprise in America. University of California Press: Berkeley, 1972.
- Mills, G., The Forgotten People: Canes River's Creoles of Color. Louisiana State University Press: Baton Rouge, 1977.
- Pierce, J. Negro Business and Business Education. Harper and Brothers Publishers: New York, 1947.
- Rabinowitz, H. Race Relations in the Urban South, Oxford University Press: New York, 1978.
- Stack, Carol, All our Kin: Strategies for Survival in a Black Community. New York: Harper and Row, 1974.
- Stuart, M. S. An Economic Detour: A History of Insurance in the Lives of American Negroes. Wendell Malliett and Co.: New York, 1940.
- Swinton, D., "Economic Status of Blacks in 1986", The State of Black America, National Urban League, 1987.
- Thurow, L. The Future of Capitalism. New York: William Morrow, 1996.
- Wilheim S. and Edwin Powell. Who Needs the Negro? Transaction Press: New York, 1964.
- Woodward, M. Voluntary Association Membership Among Black Americans: Post Civil Rights Era. The Sociol. Quarterly 28: 285-301, 1987.
- Woodson, R. Black America's Legacy of Entrepreneurship. National Journal of Sociology 2: 221, 1988.
- Walker, J. E., Free Frank: A Black Pioneer on the Antebellum Frontier. University of Kentucky Press: Lexington, KY, 1983.
- Wilson, W. J. The Truly Disadvantaged. University of Chicago Press: Chicago, 1987.
- Wilson, W. J. The Declining Significance of Race. University of Chicago Press: Chicago, 1988.

Table 1. Professions and Occupations of African Americans in Philadelphia in 1838

Bakers
Blacksmiths
Brass Founders
Caterers
Sailmakers
Cabinetmakers
Chair Bottomers
Carpenters
Candymakers
Caulkers
Tailorers
Tanners
Wheelwrights
Weavers

Table 1 was adapted from Butler, J. (4).

Table 2. Examples of Niche Goods and Services Provided to Immigrant Communities

Native Herbs and Potions ported food/grocery items	Newspapers/magazines in native Language
Native Restaurants	Native language television/radio
Imports of all types (food, clothing, cultural products)	Immigration services (legal, translation)
International Financial Services	Travel Services
Marriage Brokers	Night clubs with native language entertainment/music
Spiritualists/Healers	Schools

Table 3. AFRICAN AMERICAN BUSINESS IN TULSA, OKLAHOMA GREENWOOD SECTION FROM 1907-1923

Bath Parlor	Dentists
Pool Halls	Pharmacists
Merchandisers	Jewelers
Confectioneries	Lawyers
Feed and Grain	Nurses
Rooming Houses	Photographers
Garages, Auto Repair	Doctors
Grocers, Butchers	Real Estate Agencies
Hotels	Insurance Agents
Restaurants	Personal Care Services (barbers, hairdressers)
Funeral Homes	Cleaners
Bakers	News Dealers
Blacksmiths	Shoe Shiners
Carpenters	Launderers
Builders	Bakers
Milliners	Shoemakers
Plumbers	Tailors
Upholsters	Printers
Messengers	
Movers	

Table 3 was adapted from Butler, J. and Wilson, K. (1990)

TABLE 5. AFRICAN AMERICAN OWNED INSURANCE COMPANIES IN 1931

Afro American Life
Atlanta Life
Central Life
Domestic Life
Dunbar Mutual Insurance Society
Excelsior Mutual Life
Federal Life
Fireside Mutual Life
Golden States Mutual Life
Good Citizens Benefit Association
Great Lakes Mutual Life
Guaranty Life
Key Stone Aid Society
Liberty Industrial Life
Louisiana Industrial Life
Mammoth Life
North Carolina Mutual Life
People's Industrial Life
Pilgrim Health and Life
Provident Home Benefit Society
Richmond Benefit Life
Safety Industrial Life
Security Life
Southern Aid Society
Standard Industrial Life
Supreme Liberty Life
The Douglas
United Mutual Benefit Association
Unity Independent Life
Universal Life
Victory Independent Life
Victory Mutual Life
Watch Tower Benefit Life
Western Union Association
Winston Mutual Life

Adapted from Dubois, W. E. B. Economic Cooperation Among Negro Americans Atlanta: Atlanta University Press, 1907.

Table 5.

Beneficial Societies of Petersburg, Virginia, and Atlanta, Georgia, 1898¹

NAME	WHEN ORGANIZED	NUMBER OF MEMBERS	PETERSBURG, VIRGINIA			SICK AND DEATH BENEFITS	CASH AND PROPERTY
			ASSESSMENTS PER YEAR ²	ANNUAL INCOME			
Young Men's	1884	40	\$7.00	\$ 275.00		\$ 150.00	\$ 175.00
Sisters of Friendship, etc. ³	—	22	3.00	68.55		43.78	—
Union Working Club	1893	15	3.00	45.00		23.00	—
Sisters of Charity	1884	17	3.00	51.00		30.00	—
Ladies' Union	1896	47	3.00	135.00		—	123.25
Beneficial Association	1893	163	5.20	1,005.64		806.46	440.00
Daughters of Bethlehem	—	39	3.00	129.48		110.04	—
Living Sisters	1884	16	3.00	22.50		30.50	62.00
Ladies Working Club	1888	37	3.00	95.11		52.65	214.09
St. Mark	1874	28	3.00	84.00		32.00	150.00
Consolation	1845	26	3.00	68.00		27.00	100.00
Daughters of Zion	1867	22	3.00	66.00		40.00	36.00
Young Sisters of Charity	1869	30	3.00	90.00		30.00	100.00
Humble Christian	1868	26	3.00	68.00		35.50	75.00
Sisters of David	1885	30	3.00	90.00		60.00	130.00
Sisters of Rebecca	1893	40	3.00	120.00		85.00	175.00
Petersburg	1872	29	3.00	85.00		11.00	99.53
Petersburg Beneficial	1892	35	5.20	182.00		158.00	118.00
First Baptist Church Ass'n.	1893	100	.60	60.00		40.00	80.00
Young Men's	1894	44	3.00	211.00		202.25	100.00
Oak Street Church Society	1894	38	1.20	42.60		112.63	50.00
Endeavor, etc.	1894	98	3.00	120.00		96.00	43.00
Total		942		\$3,113.88		\$2,177.81	\$4,275.87

Adapted from Dubois, W. E. B. *Economic Cooperation Among Negro Americans* Atlanta: Atlanta University Press, 1907.

Table 5. Continued

NAME	ATLANTA, GEORGIA			
	WHEN ORGANIZED	NUMBER OF MEMBERS	ANNUAL INCOME	REMARKS
Helping Hand, First Congregational Church	1872	40	\$ 120	Benefits paid in 5 years, \$225; benevolence, \$25
Rising Star, Wheat Street Baptist Church	1879	168	250	Benefits paid in 5 years, \$370; donations, \$50; owns cemetery lot for poorer members
Daughters of Bethel, Bethel Church	1874	175	525	Donations in 5 years, \$125; benefits in 5 years, \$580
Ladies' Court of Calanthe	1891	15	72	Benefits \$590 since 1891
Daughters of Friendship, Union No. 1, Friendship Baptist Church	1869	150	450	Benefits 5 years, \$430; donates much to the church
Fort Street Benevolent Mission	1897	—	390	Benefits 1 year, \$190
Daughters of Plenty	1892	115	250	Benefits 4 years; \$200; secession from Daughters of Bethel
Pilgrims Progress, Park Street Church	1891	120	360	Benefits 5 years, \$600
Sisters of Love, Wheat Street Baptist Church	1880	190	570	Has \$600 in bank
Nine organizations		973	\$2,978	

Source: W. E. B. Du Bois, *Economic Co-Operation Among Negroes*. Atlanta, Ga.: The Atlanta University Press, 1907. 94.

¹ Atlanta University Publication, No. 3

² Assessment upon each member in case any member dies.

³ Organized before the war.

Self-Employment Rates and Regression Adjusted Self-Employment Rates by Ethnicity/Race and Sex
1980 and 1990 Census

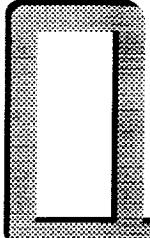
Ethnicity/Race	1990 Sample				1980 Sample				Regression Adjusted			
	Self-Employment Rates		Self-Employment Rates		S.E. Rates		S.E. Rates		Self-Employment Rates		Regression Adjusted	
	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)
Israeli	28.6 (1.581)	10.3 (1.469)	23.0 (1.845)	9.8 (1.334)	23.5	9.9						
Korean	27.9 (0.893)	18.9 (0.772)	22.9 (0.791)	9.5 (0.544)	23.7	14.7						
Russian	24.9 (0.809)	12.3 (0.709)	26.3 (0.731)	7.8 (0.565)	21.4	11.3						
Armenian	24.1 (0.801)	9.7 (0.667)	21.5 (0.869)	5.3 (0.596)	20.1	8.1						
Middle Eastern	23.1 (0.727)	10.2 (0.749)	21.6 (0.857)	7.9 (0.610)	20.3	9.2						
Greek	23.0 (0.761)	10.1 (0.681)	22.2 (0.640)	8.8 (0.517)	20.9	9.7						
Romanian	18.7 (0.820)	8.8 (0.738)	21.8 (0.901)	7.3 (0.743)	16.0	7.2						
Turkish	18.6 (1.359)	8.5 (1.439)	18.5 (1.359)	5.6 (1.364)	17.0	7.3						
Latvian	17.1 (1.412)	8.3 (1.208)	16.3 (1.257)	4.3 (0.854)	13.7	6.9						
Swiss	17.0 (0.668)	9.3 (0.667)	16.3 (0.645)	7.1 (0.593)	15.2	8.4						
White African	16.1 (0.882)	9.2 (1.092)	12.2 (1.118)	2.9 (0.862)	13.3	7.3						
Cuban	15.5 (0.679)	5.9 (0.502)	13.1 (0.544)	3.9 (0.363)	12.0	4.5						
Italian	15.2 (0.686)	5.8 (0.514)	14.1 (0.558)	4.2 (0.404)	14.5	6.3						
Canadian	14.8 (0.671)	7.0 (0.345)	11.2 (0.508)	4.0 (0.452)	12.6	6.1						
Lithuanian	14.7 (0.655)	7.4 (0.581)	14.8 (0.616)	4.5 (0.447)	13.3	7.3						
Hungarian	13.6 (0.629)	7.1 (0.576)	14.9 (0.636)	6.0 (0.536)	12.3	6.8						
Southwest Asian	13.6 (0.878)	8.8 (1.245)	10.8 (1.159)	5.1 (1.326)	11.1	7.2						
Chinese	13.5 (0.649)	9.1 (0.601)	13.2 (0.568)	5.2 (0.429)	10.6	6.8						
White British	13.4 (0.634)	7.3 (0.379)	12.2 (0.525)	5.0 (0.438)	12.1	6.6						
Scandinavian	13.2 (0.638)	6.1 (0.511)	14.5 (0.650)	5.2 (0.514)	13.2	6.3						
Ukrainian	13.1 (0.623)	6.2 (0.339)	11.8 (0.608)	4.1 (0.475)	12.0	6.2						
Yugoslavian	12.8 (0.618)	5.9 (0.521)	9.7 (0.515)	4.2 (0.456)	12.0	5.8						
Czechoslovakian	12.4 (0.614)	6.0 (0.311)	11.4 (0.602)	4.3 (0.490)	12.4	6.0						
Dutch	12.3 (0.615)	6.2 (0.329)	12.6 (0.596)	4.2 (0.611)	12.4	6.0						
Thai	12.2 (1.096)	8.7 (0.826)	13.1 (1.093)	4.0 (0.809)	9.7	5.8						
Scottish	12.1 (0.575)	8.5 (0.659)	11.9 (0.555)	4.4 (0.491)	11.2	7.7						
White South Am.	11.9 (1.499)	8.7 (1.484)	11.8 (1.024)	4.0 (0.778)	9.6	6.9						
Spaniard	11.9 (0.596)	6.1 (0.524)	11.8 (1.024)	4.0 (0.778)	9.6	6.9						
Asian Indian	11.7 (0.576)	7.4 (0.611)	9.9 (1.210)	4.7 (0.927)	9.3	5.8						
Finnish	11.6 (0.598)	6.9 (0.545)	9.6 (0.510)	4.4 (0.450)	11.2	6.3						
Spanish South Am.	11.3 (0.596)	7.4 (0.562)	8.3 (0.539)	3.0 (0.388)	10.6	6.6						
White German	11.2 (0.583)	6.2 (0.528)	11.7 (0.518)	4.9 (0.438)	12.0	6.6						
Japanese	11.1 (0.622)	6.1 (0.487)	13.4 (0.589)	5.4 (0.405)	10.1	4.5						
Slovak	11.0 (0.588)	5.4 (0.497)	6.5 (0.611)	2.6 (0.364)	10.6	5.4						
Polish	10.7 (0.593)	4.8 (0.461)	9.9 (0.572)	4.2 (0.469)	10.3	5.1						
Irish	10.6 (0.594)	5.9 (0.506)	10.3 (0.599)	2.9 (0.338)	10.5	5.9						
Oceania	10.6 (1.438)	6.1 (1.317)	12.6 (1.777)	6.5 (1.621)	9.5	9.3						
White French	10.5 (0.580)	7.6 (0.563)	10.7 (0.592)	4.6 (0.477)	10.8	7.4						
Portuguese	10.5 (0.579)	6.3 (0.516)	7.8 (0.457)	3.0 (0.336)	9.5	5.7						
Belgian	10.5 (0.672)	7.1 (0.683)	10.9 (0.750)	5.7 (0.728)	11.0	7.3						

(Continued)

Self-Employment Rates and Regression Adjusted Self-Employment Rates by Ethnicity/Race and Sex
1980 and 1990 Census

Ethnicity/Race	1990 Sample				1980 Sample				Regression Adjusted			
	Self-Employment Rates		Self-Employment Rates		S.E. Rates		S.E. Rates		Self-Employment Rates		Regression Adjusted	
	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)
White Native Am.	10.1 (0.543)	5.7 (0.491)	9.4 (0.542)	4.1 (0.465)	10.9	5.9						
French Canadian	10.1 (0.559)	5.2 (0.487)	9.0 (0.519)	3.0 (0.389)	10.3	5.9						
Spanish Caribbean	8.9 (0.569)	4.1 (0.413)	4.8 (0.580)	1.7 (0.395)	8.7	4.3						
Vietnamese	8.3 (0.505)	8.7 (0.629)	3.3 (0.413)	3.3 (0.477)	7.3	6.6						
Native American	7.2 (0.493)	4.5 (0.421)	6.3 (0.456)	3.0 (0.372)	8.0	4.1						
Spanish	7.2 (0.491)	5.5 (0.478)	7.9 (0.448)	3.1 (0.340)	7.4	5.2						
Black African	7.1 (0.467)	3.2 (0.401)	4.9 (0.436)	1.0 (0.269)	6.8	3.3						
Black Caribbean	6.8 (0.504)	3.0 (0.335)	4.8 (0.397)	1.1 (0.186)	5.7	3.0						
Mexican	6.8 (0.467)	4.4 (0.478)	4.7 (0.326)	1.0 (0.272)	6.7	3.9						
Black British	6.1 (1.166)	2.9 (0.822)	4.0 (0.414)	1.9 (0.299)	6.2	2.6						
Hawaiian	6.1 (0.581)	4.6 (0.552)	4.6 (0.624)	3.0 (0.557)	6.2	4.3						
Pacific Islander	5.9 (0.644)	3.6 (0.580)	4.7 (0.870)	0.5 (0.356)	5.0	2.9						
Other South Asian	5.7 (0.692)	4.8 (0.716)	5.1 (1.436)	0.8 (0.803)	4.8	4.3						
Spanish Cntral. Am.	5.5 (0.625)	4.6 (0.459)	5.8 (0.458)	2.5 (0.340)	5.9	4.1						
Filipino	5.1 (0.468)	3.3 (0.348)	3.4 (0.769)	2.3 (0.645)	3.5	2.1						
Black Central Am.	5.0 (0.947)	2.0 (0.593)	5.6 (1.131)	0.5 (0.341)	4.5	1.5						
Black South Am.	4.4 (0.810)	2.1 (0.530)	4.5 (1.232)	1.9 (0.770)	4.3	2.3						
African American	4.4 (0.640)	2.0 (0.281)	4.3 (0.363)	1.3 (0.209)	4.5	2.4						
Puerto Rican	3.6 (0.348)	2.3 (0.317)	3.5 (0.284)	2.0 (0.280)	4.0	3.0						
Laotian	3.2 (0.496)	2.3 (0.512)	1.9 (0.957)	0.0 (0.000)	2.6	1.9						
U.S. Total	10.8 (0.018)	5.8 (0.015)	10.4 (0.019)	3.9 (0.014)								

Notes: (1) The sample consists of non-agricultural workers who are at least 16 years old and who work 20 or more weeks per year and 15 or more hours per week. (2) The self-employment rate is the percentage of all those working who are self-employed. (3) All self-employment rates for 1990 are calculated using weights provided by the Census. (4) The adjusted self-employment rates control for differences across ethnic/racial groups in the values of the variables listed in Table 2. These rates are estimated using a 1/1000 sample which has a sample size of 60,238 for men and 49,207 for women. (5) The standard errors of the adjusted self-employment rates tend to be of a similar magnitude to those of the actual self-employment rates (see the text for more detail).



Effects of Mode and Cost of Transportation on Monies Allocated for Food by Rural Food Stamp Program Participants

A Research Report

FCS Grant 59-3198-5-062

Submitted to:

United States Department of Agriculture
Food and Consumer Service

Submitted by:

Bettie Blakely, MS, RD
Department of Human Ecology

Geri Mason, MS

Cooperative Extension Service

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April 1997



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April 24, 1997

Dr. Kilolo Kijakazi, COR
Grants to 1890 Land Grant Institutions
USDA Food and Consumer Service
Contracts Management Branch
3101 Park Center Drive
Alexandria, Virginia 22302

RE: Revised Final Report for FCS Grant 59-3198-5-031 - The Effects of Mode and Cost of Transportation on Food Buying Potential of Rural Families

Dear Dr. Kijakazi:

I have enclosed a revised copy of the Research Report for FCS Grant referenced above. There are a few minor revisions, and the questionnaire is now in camera-ready form. Once you have completed your review of the document, I will make additional copies and have them bound.

I look forward to hearing from you.

Sincerely,

Bettie Blakely
Bettie Blakely, MS, RD

*Effects of Mode and Cost of Transportation
on Monies Allocated for Food by Rural Food Stamp Participants*

By

*Bettie Blakely, MS, RD
Department of Human Ecology*

and

*Geri Mason, MS
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*University of Maryland Eastern Shore
Princess Anne, Maryland*

*In Cooperation with
Food and Nutrition Service
United States Department of Agriculture*

April 1997

ACKNOWLEDGMENTS

The authors of this report hereby express their appreciation to Donald Zeigler, former Director of Somerset County Department of Social Services, its staff and study participants for their collaboration on this project. We wish to express our gratitude to June Rhodes, Gertrude Capers, Isabelle McGibboney, Agnes Cooper Dennis, Lisa Dennis and Reva Dickerson for their contributions to this project in their role as interviewers. Also, a special thanks to Tonya Maddox, and Sweta Singh for technical assistance. The authors wish to especially thank Dr. Juanita Bowen of South Carolina State University for her vision in initiating this project. We are eternally grateful to Dr. Margaret Connolly for her tireless efforts in performing the statistical analyses. We would also like to thank Dr. Anugrah Shaw for her professional advise and support throughout this project. We are grateful for the guidance and program information provided by Dr. Kilolo Kijakazi, U S Department of Agriculture, Food and Consumer Service, Office of Analysis and Evaluation.

This research was funded, in part, through the U S Department of Agriculture, Food and Consumer Service, Grant Number 59-3198-5-062 in the amount of \$30,519. The opinions or conclusions expressed herein do not, however, necessarily reflect those of the United States Department of Agriculture, Food and Consumer Service.

Effects of Mode and Cost of Transportation on Monies Allocated for Food by Rural Food Stamp Participants

EXECUTIVE SUMMARY

I. Introduction

Federal food assistance programs are an important means of assuring that all Americans have access to an adequate, safe, nutritious and reliable food supply at reasonable cost. Rural food stamp participants may experience problems of access to full-line food markets due to travel distance and absence of a public transportation system. Such is the case for some participants in Somerset County Maryland where many may live long distances from a full-line food market and must rely on private transportation in the forms of personal vehicles, or taxi cab services.

The Food Stamp Program (FSP) is slated to undergo major changes over the next several years. The Personal Responsibility and Work Opportunity Reconciliation Act recently signed into law reduces FSP benefits by \$27.4 billion for the period FY 1996 - 2002. Given a smaller amount of money for food, as a result of program cuts, the cost to get to a store makes up a larger portion of the household's food budget, thereby reducing the money available for food purchases.

II. The Problem

The objective of the study was to determine the impact of access to food stores and markets on monies allocated for food purchase. Market access was measured using five variables: 1) average cost of trips to supermarkets, 2) average miles to supermarkets 3) number of trips to supermarket, 4) shopping at fish markets, butcher shops, or discount stores, and 5) shopping at convenience stores. The study hypothesis was as follows: For rural food stamp participants, access to food stores and markets had no significant effect on monies allocated for food.

III. Methods

Two hundred-sixty food stamp clients were recruited for the study from among those reporting for food stamp recertification during the months of January through July of 1996. The sampling plan was modified from drawing a random sample to drawing a purposive sample due to failure of clients to report as initially scheduled.

A 64-item questionnaire was administered by five trained interviewers in Princess Anne, Maryland. Each client was required to sign an informed consent form prior to participating in the study, and was provided ten dollars in compensation for completing the interview.

Statistical analyses were performed utilizing SAS statistical package for personal computers. Descriptive statistics were used to measure central tendencies including means, standard deviations, and frequencies. Also, the Pearson correlation coefficient was used to measure associations between pairs of demographic/market assess descriptors. Factors affecting the outcome measures, Total Money or Own Money, were evaluated in regression models.

IV. Results

In families without children, Own Money (cash) for food or Total Money (Own Money + food stamps) for food showed no significant correlation with miles ($p < 0.4$, $n = 75$) or cost per trip ($p > 0.50$, $n = 75$). In families with children, there was a positive correlation between Total Money spent for food and the average miles per supermarket trip ($\text{corr} = 0.16$, $p = .04$, $n = 160$) and between Own Money for food and the reported cost per supermarket trip ($\text{corr} = .23$, $p < 0.01$, $n = 135$). There was no significant correlation between Own Money for food and miles per trip ($p > 0.50$) or between Total Money and cost per trip ($p > 0.50$).

V. Conclusion

The significant predictors of Total Money for food in **households without children** ($n = 62$) were the food stamp allotment, the number of persons living in the home, and whether the participant was a sole head of household. Participants without children spent an average of \$143 per month and spent an additional \$0.96 for each additional food stamp dollar. They spent an additional \$19 for each person living in the household and those who did not live with a parent or partner spent an additional \$66 per month compared to those who shared head of household status. Own Money spent for food showed that same dependence on family situation but was not significantly affected by the food stamp allotment. The average amount of Own Money spent for food was \$51 per month and those who were the sole head of household spent an additional \$68 per month compared to those who had a partner or lived with a parent.

Total Money spent for food among **households with children** was significantly correlated with family income, food stamp allotment, number of persons living in the home, whether anyone in the household was more than 60 years, and whether the participant was the sole head of household. The average total amount for food was \$268 per month. This amount increased by almost \$5 for each additional \$100 of income, increased \$0.60 for each food stamp dollar, increased \$13 for each additional person in the home, was \$42 less if there was a person over age 60 in the household and was \$35 higher if the participant was a sole head of household. Those who had a family car spent an additional \$20 per month on food. Other associations with market access suggested that spending to shop and spending on food increased together. Those who shopped at specialty/convenience stores spent an additional \$36 each month and those who paid for rides to the stores spent \$22 more each month than those who did not.

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Effects of Mode and Cost of Transportation on Monies Allocated for Food by Rural Food Stamp Participants

INTRODUCTION

Identification of Problem

The federal Food Stamp Program (FSP) is designed to assist low-income families in obtaining a more nutritious diet by increasing their food-purchasing power. It provides assistance to more than 27 million persons in a typical month, and distributed more than \$23 billion in benefits for the fiscal year 1994 (1). The FSP increases the food-buying power of participants, and stimulates demand for agricultural commodities (2). Research indicates that food stamp participants have approximately 14 percent higher food expenditures per week, 13 percent more nutrients in the household food supply, and 16 percent more nutrients in the household food intake, as compared to low-income, non-food stamp participants (3).

Food stamp benefits are calculated on the assumption that a household will spend 30 percent of its net income on food, and the FSP will provide the difference between that amount and the maximum benefit. In order to maximize FSP benefits, participants must have access to full-line supermarkets at which a variety of nutritious foods are available for purchase. Modes of transportation and distances traveled to retail markets may impact the amount of money participants spend for transportation associated with grocery shopping and may result in a reduction of monies expended for food.

Objective and Hypothesis

The objective of this project was to *determine the impact of access to food stores and markets on monies allocated for food purchase*. Market access was measured by five variables: 1) average cost of trips to supermarkets, 2) average miles to supermarket, 3) number of trips to supermarket, 4) shopping at fish markets, butcher shops, or discount stores; and 5) shopping at convenience stores. The hypothesis for the study was: *For rural food stamp participants, access to food stores and markets had no significant effect on the monies expended for food purchase*.

The research questions which guided the study were as follows:

1. What are the demographic characteristics of the sample?
2. Where do participants shop for food?
3. What modes of transportation do participants utilize to reach these markets?
4. How far and how often do participants travel to food markets?
5. What is the average round-trip cost of travel to and from these markets?
6. How much of their own money do participants spend for food?
7. Including food stamp benefits, how many dollars are spent for food?
8. What are the relationships between distance traveled to markets, transportation cost and cash expenditures for food?
9. What is the relationship between food stamp benefits and food security?

BACKGROUND INFORMATION

History of Food Stamp Program

The Food Stamp Program began as a pilot in 1961 and was authorized as a permanent program in 1964 to help low-income households obtain a more nutritious diet by using government issued stamps to purchase foods in the marketplace (1). Low-income households are provided coupons which are used similarly to cash at authorized grocery stores to ensure that they have access to a healthy diet. The U.S. Department of Agriculture administers the Food Stamp Program at the federal level through the Food and Consumer Service (FCS), formerly Food and Nutrition Service. At the state level, local social service agencies administer the program (4,5).

Eligibility and Benefit Determination

Eligibility criteria must be met before a household may participate in the Food Stamp Program. Certain criteria are established at the federal level with application in all states. Potential participants are required to provide proof of their statements regarding household assets. Specific criteria include: 1) gross monthly income of households must be 130 percent or less of the federal poverty guidelines; 2) households may have no more than \$2,000 in countable resources, such as a bank account (\$3,000 if at least one person in the household is age 60 or older), and vehicles with fair market values in excess of \$4,600 are counted as assets; 3) most able-bodied adult applicants must meet certain work requirements, and 4) all household members must provide a Social Security number or apply for one (4).

Participation in the federal food assistance programs does not eliminate the need for emergency food assistance. According to the Food Research and Action Center (FRAC), more than two-thirds of the households that rely on emergency food programs participate in the food stamp program. This data, based on the Community Child Hunger Identification Project (CCHIP), also indicates that it is common for families participating in emergency food

programs and federal food assistance program to rely on friends and relatives to increase their food resources. In fact, this data revealed that 69 percent of food stamp participants receive assistance from friends or relatives (6).

Market Access Barriers

Isolation and gaps in rural service delivery systems are barriers confronting some families which limit their access to sufficient food on a regular basis. Federal food assistance programs are an important means of assuring that all Americans have access to an adequate, safe, nutritious and reliable food supply at reasonable cost (7). Rural food stamp participants may experience problems of access to full-line food markets due to travel distance and absence of a public transportation system. This is the case for some participants in Somerset County Maryland where many may live long distances from a full-line food market and must rely on private transportation in the form of a personal vehicle, or taxi cab service.

Somerset County, one of three counties located the lower eastern shore of Maryland, lies approximately 120 miles southeast of the Washington-Baltimore metropolitan area. The economic health of families in Somerset County reveals a level of overall distress. The unemployment rate in 1993 was 12.4, doubled the rate of 6.2 percent for the State of Maryland. Somerset County is geographically isolated and has consistently ranked in the lowest quartile for poverty among all Maryland counties. The median family income in 1993 was \$27,097 with 40.7 percent of these families having an effective buying income of less than \$20,000 (Maryland Committee for Children, Inc., 1994).

The number of food stamp participants in Somerset County rose from 1,968 in 1990 to 3,025 in 1994, an increase of 53.7 percent over the four-year period (Maryland Food Committee). In the State of Maryland, monthly food stamp benefits are electronically transferred to the participant's account. Each participant is provided a debit card which is used in a fashion similar to a debit bank card. Participants residing in Somerset County report to the Department of Social Services in Princess Anne, Maryland for food stamp services.

The Food Stamp Program is slated to undergo major changes over the next several years. The Personal Responsibility and Work Opportunity Reconciliation Act recently signed into law reduces FSP benefits by \$27.4 billion for the period FY 1996 - 2002. Given a smaller amount of money for food, as a result of the program cuts, the cost to get to a store makes up a larger portion of the household's food budget, reducing the money available for food. Rural food stamp participants may be greatly affected by this legislation which will reduce the number of people meeting eligibility requirements. When income is inadequate to meet the costs of housing, utilities, health care, and other fixed expenses, these items compete with and may take precedence over food (4,10).

METHODOLOGY

Subjects

Two hundred sixty food stamp clients were recruited for the study following pilot testing of the research instrument and training of the interview staff. Participants were recruited from among clients who were reporting for FSP recertification during the period of January through July of 1996. The proposed sampling plan included a random sample in which a computer program would be used to identify potential subjects. Unfortunately, a large number of clients did not report for recertification as scheduled and the plan was modified from drawing a random sample to drawing a purposive sample.

Thereafter, all clients reporting for recertification were invited to participate in the study during the period identified above. Clients who indicated a desire to participate in the study were referred to one of the five interviewers. Upon completion of the questionnaire, each client was awarded ten dollars.

Procedures

Following a review of related literature, a 64-item questionnaire was developed for the study. The questionnaire included the following sections: Section I - Demographics, Section II - Markets, Transportation, and Shopping Practices, Section III - Supplemental Food Sources, Section IV - Food Security, and Section V - Household Income. The questionnaire was reviewed by a social worker from the Somerset County Department of Social Services, a community nutritionist, the statistician, a Cooperative Extension Aide and representatives from the USDA Food and Consumer Service. Following some modifications, the instrument was pilot tested using ten food stamp clients who were not included in the study. Minor revisions were made based on feedback from the clients and six potential interviewers were identified. A four-hour group training session was held and five individuals were selected to conduct the interviews.

A recertification roster for each of the survey months was obtained from the Department of Social Services located in Princess Anne. Based on this roster, an interview schedule was developed to insure that the appropriate number of interviewers was available on recertification days. Each client reporting for recertification was asked to inform their caseworker if they were willing to participate in the study. If a client indicated an interest in participating, he or she was escorted to an interviewer where a verbal explanation of the project was given and the client was asked to sign a consent form prior to being interviewed. Each study participant was awarded \$10 for completing the survey.

Statistical Methods

Statistical analyses were performed utilizing SAS statistical package for personal computers. Descriptive statistics were used to measure central tendencies including means, standard deviations, and frequencies. Also, the Pearson correlation coefficient was used to measure associations between pairs of demographic/market assess descriptors.

This report focuses on the question of how access to markets impacts monies allocated for food. Access to markets was primarily measured by: 1) average cost of trips to supermarket, 2) average miles to supermarket, 3) number of trips to supermarket, 4) shopping at fish markets, butcher shops, or discount stores, and 5) shopping at convenience stores. One measure of money allocated for food (Total Money) was the sum of: 1) the amount of participant's own money that was spent for food, and 2) the food stamp allowance. The other measure (Own Money) was the amount of participant's own money spent on food in the previous month as participants are expected to provide 30 cents of each food dollar from their own resources and the remaining 70 cents are provided by food stamp benefits.

Factors affecting either measure (Total Money or Own Money) were evaluated in regression models. The regression fit those with or without children in the home, separately. Covariates in the regressions were expressed as differences from the sample mean, so that the estimated intercept was equal to mean spending in the sample. The criteria for a covariate to enter and stay in the model were set at $p=0.15$ and $p=0.10$, respectively.

RESULTS

Household Demographics

The average age of the participants was 41 years ranging from 18 to 91 years. The average number of persons in the household was 3.0, ranging 1-7, and the average number of children in the home was 1.4, ranging from 0-5. The average number of persons in the home over 60 was .3, ranging from 0-3, and the average number of disabled persons in the home was .3, ranging from 0-1. Table 1a depicts means, standard deviations and ranges for selected demographic characteristics of the sample.

Table 1a
Household Demographics

Means, Standard Deviations and Ranges	All Interview Subjects			
	Mean	Std Deviation	Min	Max
Age of subjects	40.6	16.4	18.0	91.0
Age of head of household	43.8	17.2	19.0	91.0
Number of persons living in home	3.0	1.5	1.0	7.0
Children in home	1.4	1.3	0.0	5.0
Adults over 60 years of age	0.3	0.6	0.0	3.0
Number of disabled person	0.3	0.4	0.0	1.0

Of the 260 subjects, 82 percent were women, 18 percent were married, 57 percent were single, and others were divorced, separated, or widowed. Ninety-six were White (37 percent), 161 were Black or African American (62 percent) and three were Hispanic. Most of the participants (64 percent) completed between 9 and 12 years of schooling. A majority of clients, 43 percent, lived in Princess Anne, the County Seat, 37 percent lived in Crisfield, and the remaining 20 percent lived in lesser populated towns such as Deal Island, Smith Island, Fairmount, and Upper Ferry. The number of unemployed subjects was 196, or 75 percent; there were 23 participants (9 percent) who worked full-time, and 37 participants (14 percent) who worked part-time. The mean reported monthly income was \$398, not including food stamp benefits. Fifty-eight percent had incomes between 301 and 400 dollars or less. Table 1b depicts frequency data for selected demographic characteristics of the sample.

Table 1b
Household Demographics

Frequencies	All Interview Subjects	
	n	%
Sex of Subject		
- Male	46	17.7
- Female	214	82.3
Marital Status		
- Married	46	17.7
- Divorced	22	8.5
- Separated	25	9.6
- Widowed	17	6.5
- Single	149	57.3
- Other	1	0.4
Head of Household		
- Self only	205	78.8
- Self and mate	27	10.4
- Live w parent(s)	27	10.4
Race of Subject		
- White	96	36.9
- Black/African American	161	61.9
- Hispanic	3	1.2
Head of House/Education		
- 5th grade or less	6	2.3
- 6th - 8th grade	29	11.2
- 9th - 12th grade	165	63.5
- GED	19	7.3
- 1 - 2 yr college	21	8.1
- 3 - 4 yr college	11	4.2
- college graduate	5	1.9
- other	4	1.5
Address in		
- Princess Anne	111	42.7
- Crisfield	97	37.3
- other	52	20.0
Subj Hours/week worked		
- More than 30 hr/week	23	8.8
- Less than 30 hr/week	37	14.2
- unemployed	196	75.4
Income		
- Less than \$200	47	18.1
- \$201 - \$300	54	20.8
- \$301 - \$400	44	16.9
- \$401 - \$500	48	18.5
- \$501 - \$600	15	5.8
- \$601 - \$700	17	6.5
- More than \$700	26	10.0

Access to Markets

Two hundred fifty-nine respondents (99.6 percent) shopped at supermarkets, 16 (6.2 percent) reported shopping at convenience stores and 44 (15 percent) noted shopping at specialty stores such as meat markets and fish markets. One hundred-eighty four persons (71 percent) reported using a family automobile; 92 (35 percent) indicated they sometimes paid for a ride to a market; 74 or 29 percent noted that they sometimes walked or took a bicycle to a market. Table 2a depicts market frequencies for the past month.

Table 2a
Market Utilization

Frequencies	All Interview Subjects	
	n	%
Number of Supermarkets		
- 0	1	0.24
- 1	59	22.7
- 2	141	54.2
- 3	48	18.5
- 4	10	3.8
- 5	1	0.4
Number of Conv Stores		
- 0	244	93.8
- 1	15	5.8
- 2	1	0.4
Number of Spec Stores		
- 0	216	83.1
- 1	41	15.8
- 2	3	1.2

The average number of trips per month to a supermarket was 7.0 (± 5.7) and the average distance was 8.0 (± 7.7) miles per trip. The average number of trips per month to a convenience store was 8.8 (± 10.5) and the average distance was 4.5 (± 7.0) miles per trip. The average number of trips per month to a specialty market was 1.4 (± 0.6) and the average distance was 14.1 (± 12.12) miles per trip.

The average total monthly cost for trips to and from supermarkets was \$25.80 (± 26.20), the average total monthly cost for round-trips to convenience stores, for those who went, was \$11.50. The average cost for a round-trip to a specialty store, for those who went, was \$9.30 (± 8.0). Some participants reported total costs to visit a market, some reported costs of a one way trip, and some reported the distance. The most comprehensive measure of travel cost was computed first from the total cost, or, if that was not available, from the cost each way, or if that was not available, from the miles (round-trip) multiplied by \$0.083 and by the number of trips per month. The rationale for this number was based on the average cost of one gallon of regular gasoline (\$1.25) in Crisfield and Princess Anne townships divided by an estimated 15 miles to a gallon of gasoline. Table 2b summarizes mean values for market access variables.

Table 2b
Market Access

Means, Standard Deviations, and Ranges	All Interview Subjects				
	Mean	Std Dev	n	Min.	Max.
Supermarket trips last month	7.0	5.7	244	1	35
Conv store trips last month	8.8	10.5	13	1	30
Spec store trips last month	1.4	0.6	35	1	3
Avg miles to super market	8.0	7.7	208	0	50
Avg miles to conv store	4.5	7.0	12	0	25
Avg miles to spec store	14.1	12.2	29	0	53
Total cost trips to supermarket	25.8	26.2	239	0	120
Total cost trips to conv store	11.5	14.5	14	0	50
Total cost trips to spec store	9.3	8.0	40	0	32

Monies Allocated for Food

Of their Own Money, subjects spent an average of \$51.72 (± 62.25) for food, with a range of \$00.00 to \$400.00 per month. Those households without children spent \$46.72 (± 43.74) and those with children spent \$54.24 (± 59.63). Including food stamp benefits, participants spent \$273.67 (± 118.11). Participants without children spent \$139.60 (± 89.91) and participants with children spent \$286.90 (± 98.70).

Table 3
Monies Allocated for Food

Means, Standard Deviations, and Ranges	All Interview Subjects				
	Mean	Std Dev	n	Min	Max
My money for food last month	51.72	62.25	241	0	400
Approximate income last month (w/o food stamps)	398.20	221.50	251	150	1050

Simple correlation between monies for food and other factors were evaluated using Pearson coefficient. In households without children, Own Money for food or Total Money for food showed no significant correlation with miles ($p > 0.4$, $n = 750$) or cost per trip ($p > 0.5$, $n = 75$). In households with children, there was a positive correlation between Total Money (Own Money + food stamps) spent for food and the average miles per supermarket trip ($corr = 0.16$, $p = < 0.04$, $n = 160$) and also, between Own Money for food and the reported cost per supermarket trip ($corr = .23$, $P < 0.01$, $n = 135$), there was no significant correlation between Own Money for food and mile per trip ($p > 0.50$) or between Total Money and cost per trip ($p > 0.50$). Table 3 presents the descriptive statistics for Own Money allocated for food by study participants.

Regression

Stepwise regressions for total food expenditures resulted in the following estimates: **For those without children**, the significant predictors were food stamp allotment, number of persons living in the home, and whether the participant was sole head of household. The model had an R^2 of .85 for $n=66$. The average monthly spending was \$143, for each person at home spending increased \$19 (± 5 , $p < 0.01$), and participants who were sole head of household (rather than married or living with a parent or other head of household) spent an additional \$66 (± 12 , $p < 0.01$). Table 4a lists variables in the selection set of the stepwise regression to predict monthly spending in households without children.

Table 4a
Households without Children

Means, Standard Deviations, and Ranges	Mean	n	Std Dev	Min	Max
Monies for food last month	139.6	80	89.9	41	653
Food stamps amount last month	92.9	80	81.7	0	453
Avg cost of trip to supermarket	2.0	75	4.1	0	30
Avg miles to supermarket	12.1	75	13.2	0	70
Supermarket trips last month	7.8	75	6.8	1	35
Shops any conv store	0.1	76	0.3	0	1
Shops fish/butcher/other	0.1	76	0.2	0	1
Household automobile	0.5	75	0.5	0	1
Ever pays to ride	0.5	80	0.5	0	1
May walk or bike to store	0.3	80	0.5	0	1
Age of subject	52.4	80	18.7	19	91
Do not live with mate or parent	0.8	80	0.4	0	1
A head of household worked	0.2	80	0.4	0	1
Income from AFDC	0.2	80	0.4	0	1
Income from SSI	0.4	80	0.5	0	1
Income from Unemployment Benefits	0.1	80	0.3	0	1
Number of persons living in the home	2.0	80	1.3	1	7
Approximate monthly income	393.4	76	235.7	150	1050
Receives WIC	0.0	80	0.1	0	1
Soup Kitchen/Emergency/Church	0.1	80	0.3	0	1
Fishing/gardening/hunting	0.2	80	0.4	0	1
Any adult(s) over 60 years of age	0.5	80	0.5	0	1
Number of school meals	0.0	80	0.0	0	0

For those with children, the significant predictors were monthly income, food stamp allotment, number living in the home, average miles per trip to the supermarket, whether the participant shopped at specialty stores, whether the subject was at least 25 years old, whether the household had anyone more than 60 years old, and whether the participant was sole head of household. The model had an R^2 of 0.77 for $n=132$. The average spending was \$268, for each \$100 of monthly income spending increased \$4.9 (± 2.1 , $p=0.02$), for each food stamp dollar, spending for food increased \$0.60 (± 0.04 , $p=<0.01$), for each person at home, spending increased \$13 (± 4 , $p=<0.01$); for each additional mile to the supermarket, spending increased \$0.6 (± 3 , $p=0.05$). Participants who went to specialty stores spent an

additional \$20 (± 11 , $p=0.07$), and those with someone in the home older than 60 years spent \$42 (± 14 , $p<0.01$) less. Participants who were the sole head of household (rather than married or living with a parent or other head of household) spent an additional \$35 (± 12 , $p<0.01$). Table 4b lists variables in the selection set of the stepwise regression to predict monthly spending in household with children.

Table 4b
Households with Children

Means and Ranges	Mean	n	Std Dev	Min	Max
Monies for food last month	286.4	161	98.7	100	649
Food stamps amount last month	232.1	161	108.5	0	566
Avg cost of trip to supermarket	1.5	160	2.3	0	13
Avg miles to supermarket	12.6	160	13.6	0	100
Supermarket trips last month	6.8	160	5.2	1	30
Shops any conv store	0.0	160	0.2	0	1
Shops fish/butcher/other	0.2	160	0.4	0	1
Household automobile	0.5	148	0.5	0	1
Ever pays to ride	0.5	161	0.5	0	1
May walk or bike to store	0.3	161	0.5	0	1
Age of subject	34.6	161	11.1	18	83
Do not live with mate or parent	0.8	161	0.4	0	1
A head of household worked	0.3	161	0.5	0	1
Income from AFDC	0.6	161	0.5	0	2
Income from SSI	0.1	161	0.4	0	1
Income from Unemployment Benefits	0.1	161	0.3	0	1
Number of persons living in the home	3.6	161	1.3	1	7
Approximate monthly income	405.3	159	221.5	150	1050
Receives WIC	0.3	161	0.5	0	1
Soup Kitchen/Emergency/Church	0.1	161	0.3	0	1
Fishing/gardening/hunting	0.1	161	0.3	0	1
Any adult(s) over 60 years of age	0.1	161	0.3	0	1
Number of school meals	24.0	161	21.1	0	120

Interpretation of Regression

The high R^2 occurs because models regressed money on money, relationships which are necessarily strongly linear. It appears that those who have more resources, spend more to shop, travel further to shop, and also spend more for food. It is recommended that a non-monetary measure, such as dietary intake, be used to determine whether the longer distances traveled by some rural recipients has a negative impact on nutrition.

Food Security

This study also investigated food insecurity of rural FSP participants, using the Cornell/Radimer food insecurity statements (9,10). Permission to use these statements was granted by Dr. Christine Olson as noted in Appendix B. The possible responses to each statement were: "Often true," "Sometimes true," or "Never true." The statements are listed below.

Radimer's Food Insecurity Statements	
53.	I worry whether my food will run out before I get money or food stamps to buy more.
54.	We eat the same thing for several days in a row because we only have a few different kinds of food on hand and don't have money or food stamps to buy more.
55.	The food that I bought just didn't last, and I didn't have money or food stamps to buy more.
56.	I ran out of the foods that I needed to put together a meal and I didn't have money or food stamps to get more food.
57.	I can't afford to eat properly.
58.	I am often hungry, but I don't eat because I can't afford enough food.
59.	I eat less than I think I should because I don't have enough money or food stamps for food.
60.	I cannot give my child(ren) a balanced meal because I just can't afford enough food.
61.	My child(ren) is/are not eating enough because I just can't afford enough food.
62.	I know my child(ren) is/are hungry sometimes, but I just can't afford more food.

Responses to food security questions, evaluated for correlation with spending, household characteristics, and market access showed some differences between families with or without children. **Among those without children**, positive responses for statements 53, 55, and/or 56 were more likely if the participant made fewer supermarket trips each month, if the participant was younger and if no one in the household was over 60 years. Again, among those without children, positive responses for statements 54 and/or 57 were more likely if the participant traveled fewer miles to the supermarket. No items in the covariate set was correlated with statements 58 and 59 among those without children.

Among those with children, positive responses for statements 53, 55, and/or 56 were more likely if the participant spent more of his/her money for food, and were less likely if the food stamp allotment was higher. Positive responses for statements 54, 57, and/or 60 were more likely if the participant spent more of his/her Own Money for food. Positive responses to statements 58 and/or 59 were more likely if the participant spent more of his/her Own Money for food, had a smaller food stamp allotment, and had a higher cost per supermarket trip. Positive responses were more likely to statements 61 or 62 if they spent more of their Own Money for food, had a lower food stamp allotment, or spent more money to get to the supermarket. Table 5 illustrates simple correlations between positive responses to Radimer's food insecurity statements and demographic/market assess descriptors.

Table 5
Simple Correlations

Positive correlations (Pearson) represent measures and factors associated with food insecurity

A. Without children

Statements:

53 - "I worry whether food will run out"

55 - "food I bought just didn't last"

56 - "I ran out of food"

Significant ($p < 0.05$) simple correlation with agreement on statements 53, 55 and/or 56 was found for:

Number of supermarket trips: corr = -0.25, $p=0.05$, n = 61.

Age of head-of-household: corr = -0.37, $p < 0.01$, n = 64

Any in household over 60: corr = -0.33, $p < 0.01$, n = 65

Statements:

54 - "We eat the same thing for several days in a row"

57 - "I can't afford to eat properly"

Significant ($p < 0.05$) simple correlation with agreement on statements 54, and/or 57 for:

Miles/supermarket trip: corr = -0.36, $p < 0.01$, n=60

B. With children

Statements:

53 - "Worry whether food will run out"

55 - "food I bought just" didn't last

56 - "I ran out of food"

Significant ($p < 0.05$) simple correlation with agreement on Questions 53, 55, and/or 56 was found for:

Own money for food: corr = 0.26, $p < 0.01$, n=158

Food stamp allotment: corr = -0.18, $p=0.02$, n=158

Statements:

54 - "We eat the same thing for several days in a row"

57 - "I can't afford to eat properly"

60 - "cannot give children a balanced meal"

Significant ($p < 0.05$) simple correlation with agreement on 54, 57 and/or 60 for:

Own money for food: corr = 0.25, $p < 0.01$, n=158

Statements:

58 - "don't eat because I can't afford enough food"

59 - "eat less than I think I should"

Significant ($p < 0.05$) simple correlation with agreement on 58 and/or 59 for:

Own money for food: corr = 0.42, $p < 0.01$, n=158

Food stamp allotment: corr = -0.28, $p < 0.01$, n=158

Cost per trip to supermarket*: corr = 0.19, $p=0.02$, n=157

Statements:

61 - "children not eating enough"

62 - "my children are hungry"

Significant($p < 0.05$) simple correlation with agreement on 61 & 62 for:

Own money for food: corr=0.40, $p < 0.01$, n=156

Food stamp allotment: corr=-0.23, $p < 0.01$, n=156

Cost per trip to supermarket*: corr=0.18, $p=0.03$, n=155

Cost is \$ amount reported by those without a family auto and is calculated by miles = \$1.25/15 for those with an auto.

Conclusions

Factors affecting food spending of participants in households with children were different from those affecting food spending of participants in households without children. Significant predictors of Total Money spent for food and Own Money spent for food among a set of household characteristics and measures for market access, were evaluated. The significant predictors of Total Money for food in households without children (62 participants responding) were the food stamp allotment, the number of persons living in the home, and whether the participant was a sole head of household. These participants spent an average of \$143 per month and spent an additional \$66 per month compared to those who shared head of household status. Own Money spent for food showed the same dependence on family situation but was not significantly affected by the food stamp allotment. The average amount of Own Money spent for food was about \$52 per month and those who were the sole head of household spent an additional \$66 per month compared to those who had a partner or lived with a parent.

In families with children, Total Money spent for food was significantly correlated with family income, food stamp allotment, number of persons living in the home, whether anyone in the household was more than 60 years, and whether the participant was the sole head of household. The average total amount for food was \$268 per month. This amount increased by almost \$5 for each additional \$100 of income, increased \$0.60 for each food stamp dollar, increased \$13 for each additional person in the home, was \$42 less if there was a person over age 60 in the household and was \$35 higher if the participant was a sole head of household. Those who had a family car spent an additional \$20 per month on food. Other associations with market access suggested that spending to shop and spending on food increased together. Those who shopped at specialty/convenience stores spent an additional \$36 each month and those who paid for rides to the stores spent \$22 more each month than those who did not.

Responses to food insecurity statements, evaluated for correlation with spending, household characteristics, and market access also showed some differences between families with children and those without children. Food insecurity in households without children was associated with number of supermarket trips, age of head of household and miles per supermarket trip. Participants who made fewer supermarket trips indicated a vulnerability to insufficient quantities of food (statement 53, 55, and 56). Diet quality (statements 54 and 57) was more likely to be an issue for participants who traveled fewer miles per supermarket trip.

In households with children, food insecurity was impacted by Own Money for food, food stamp allotment, cost per supermarket trip, and miles per supermarket trip. Diet quantity (statements 58, 59, 61, and 62) was an issue for both participants and their children if the cost per supermarket trip was higher.

In summary, monies allocated for food showed no relationship to mode and cost of transportation associated with grocery shopping; therefore, we failed to reject the null hypothesis. Other associations with market access suggested that spending to shop and spending for food increased together.

REFERENCES

1. Trippe C. Rates Up:Trends in FSP Participation Rates, 1985-1992. In: Hall D, M Starvrianos, ed. Nutrition and Food Security in the Food Stamp Program. Alexandria, VA: Food and Consumer Service, Office of Analysis and Evaluation; 1996. US Dept of Agriculture publication MPR 8156-019.
2. Splett P. L. Federal Food Assistance Programs: A Step to Food Security for Many. *Nutrition Today*. 2 (29): 194.
3. Kennedy, E. Morris, P. M. Lucas, R. Welfare Reform and Nutrition Programs: Contemporary Budget and Policy Realities. *J Nutr Educ*. 1996; 28:67-70.
4. Center on Budget Analyses Welfare Reform Proposal. Excerpted:The Personal Responsibility Act: An analysis. Center on Budget and Policy Priorities. *Nutrition Week*. 1995 (25)1.
5. Unites States General Accounting Office. Food Stamp Program. A Demographic Analysis of Participation and Nonparticipation. 1990. 035206/129696.
6. Community Childhood Hunger Identification Project: A Survey of Childhood Hunger in the United States. Washington, D.C: Food Research and Action Center, 1995.
7. Greenstein, R. Proposals for Improving the Food Stamp Benefits Structure in 1990. Washington, DC: Center on Budget and Policy Priorities, 1990.
8. Off to a Poor Start: Infant Health in Rural America. Washington, D. C. Public Voice for Food and Health Policy. Report, 1986.
9. Radimer, K.L. CM Olson, JC Greene, CC Campbell, J Habicht. Understanding Hunger and Developing Indicators to Assess it in Women and Children. *J Nutr Education*. 1996; 24:365-455.
10. Kendall, A.C. EA Frogillo, Jr. Validation of the Radimer/Cornell Measures of Hunger and Food Insecurity. *J of Nutr*. 1995; 125:2793-2801.

APPENDIX A
RESEARCH QUESTIONNAIRE

Questionnaire

Directions: Subject number will correspond to the sequence number noted on the random sample roster. The interviewer should print his/her first and last name in the space provided. Record the date and the time the interview began. Information contained in these blocks are for the benefit of the interviewers and should not be read to the subjects. Responses to questions are to be indicated with a check mark in the brackets ([]) or the response written in the space provided (____). Write in "N/A at the end of the question if it does not apply to the participant. At the end of each page, check to ensure that each question has been fully answered.

Subject Number _____

Date _____

Interviewer _____

Time Interview Began _____

Section I: Demographic Data

Q-1. It is important to have a complete address for each interviewee. Make sure you obtain the street address, apartment number or P.O. box number as well as the city or town, and zip code.

1. During the past month, I lived at:

Street _____

Apartment # _____

City _____

State _____

Zip Code _____

Q-2. May be answered through observation. However, if you are uncertain, ask the sex of the interviewee.

2. My Sex Is:

Male Female

3. My age is _____

4. During the past month, I was:

Married Single Specify other _____

5. The race (ethnic group) I belong to is:

White Black/African American Asian/Pacific

Hispanic Other _____

6. The race (ethnic group) my spouse\mate belongs to is:

White Black/African American Asian/Pacific

Hispanic Other _____

7. My highest level of schooling completed is: (check one)

- | | |
|---|--|
| <input type="checkbox"/> 5th grade, or less | <input type="checkbox"/> 1 - 2 years college |
| <input type="checkbox"/> 6 - 8 grade | <input type="checkbox"/> 3 - 4 years college |
| <input type="checkbox"/> 9 - 12 grade | <input type="checkbox"/> College graduate |
| <input type="checkbox"/> GED | <input type="checkbox"/> Other _____ |

8. The highest level of schooling completed by my mate is: (Check one)

- | | |
|---|--|
| <input type="checkbox"/> 5th grade, or less | <input type="checkbox"/> 1 - 2 years college |
| <input type="checkbox"/> 6 - 8 grade | <input type="checkbox"/> 3 - 4 years college |
| <input type="checkbox"/> 9 - 12 grade | <input type="checkbox"/> College graduate |
| <input type="checkbox"/> GED | <input type="checkbox"/> Other _____ |

9. Last month, I worked:

- | |
|---|
| <input type="checkbox"/> More than 30 hours per week (employed full-time) |
| <input type="checkbox"/> less than 30 hours per week (employed part-time) |
| <input type="checkbox"/> I did not work (unemployed) |

10. Last month, the number of hours my mate worked was:

- 35 - 40 hours/wk (employed full-time)
- less than 35 hours per week (employed part-time)
- Mate did not work (unemployed)

11. The number of persons living in the home last month was _____

12. During the past month, the head-of-household was: Self only Self and mate

13. The age of the head-of-household was: _____

Q-14 Write the total number of males and/or females in household, then write the number of people, by sex, for each age category.

14. The number of adults, by age, living in the home last month was:

Male	Age, 19 - 25	Age, 26 - 40
	Age, 41 - 59	Age, 60 +
Female	Age, 19 - 25	Age, 26 - 40
	Age, 41 - 59	Age, 60 +

Q-15 Write the total number of children in the household. Also write the number of children in each age category.

15. The number of children , by age, living in the home last month was:

<input type="text"/> Total	<input type="text"/> Infants, 0 - 5 mos.	<input type="text"/> Girls, 7 - 10
	<input type="text"/> Infants, 6 - 12 mos.	<input type="text"/> Females, 11 - 14
	<input type="text"/> Children, 1 - 3	<input type="text"/> Females, 15 - 18
	<input type="text"/> Children, 4 - 6	<input type="text"/> Males, 11 - 14
	<input type="text"/> Boys, 7 - 10	<input type="text"/> Males, 15 - 18

Q-16 Disabled person(s) include those who are mentally or physically handicapped.

16. The number of disabled persons living in the home over the past month was: _____

Section II: Markets, Daily Food Guide Knowledge, Shopping Practices and Transportation

Q-17 Ask the interviewee to list all the stores that he/she shopped for grocery during the past month. Ask the participants about supermarket chains and local stores such as: Food City, Food Lion, Giant Food, Meatland, Riggins Market, Seven Eleven, Shore Stop, Thrift Bread Store, etc. Market type should be left blank.

17. The names, locations, market types, and travel cost to and from the stores where I shopped for food during the past month were:

Name of Market	Location of Market	Market Type	Transportation Cost				
			To	From	Number Trips Last Month	Total Cost/Mo	Distance Traveled One Way
A.							
B.							
C.							
D.							
E.							

Q-18. Look at the name of the first store mentioned by the interviewee and list all foods under the Food Category for each store. For Example: When you shopped at Food Lion last month, did you buy fresh fruits and vegetables, eggs, cheese, milk, meats, poultry, fish, etc. Enter a "✓" in the space provided if the food was purchased at that market. If food was not purchased, enter an "x" in the space provided and code the reason: 1 = Do Not Eat ; 2 = Food not available at this store; 3 = Cannot Afford; 4 = Other (specify)

Food Category	Market Identification				
	A	B	C	D	E
Milk					
Yogurt					
Cheese					
Eggs					
Meat/poultry					
Fish					
Fruit and/or vegetable juice					
Fresh fruits					
Fresh or frozen vegetables					
Canned fruits					
Canned Vegetables					
Cereals					
Rice, dried beans/peas					
Bread/rolls					
Potatoes					
Pasta					
Chips, soft drinks and other snack foods					

Q-24 - 25 Please note that these two questions are designed to determine if foods were purchased before the expiration date and then used at home before the "shelf Life" date expired.

Last month, before going to the store or while at the store shopping for food, I did the following:

Activity	Response	
19. Checked foods on hand before shopping.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
20. Planned meals before shopping.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
21. Used coupons to prepare for shopping.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
22. Used newspaper flyers to prepare for shopping.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
23. Compared prices at the store.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
24. Used store brand foods when possible.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
25. Read "Nutrition Facts" labels at the store.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
26. Looked for "sell by" date before buying.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
27. Prepared food at home by the "use by" date.	<input type="checkbox"/> Yes	<input type="checkbox"/> No

The equipment I used to store cold foods was:

- 28. Refrigerator/freezer:** Yes No If no, how were cold foods stored? _____
- 29. Freezer, stand alone:** Yes No

30. During the past month, my transportation to markets/stores was by:

Transportation Type	Response	
	[] Yes	[] No
Household automobile	[] Yes	[] No
Neighbor/family/friend's automobile (not paid)	[] Yes	[] No
Neighbor/family/friends automobile (paid)	[] Yes	[] No
Taxi (paid)	[] Yes	[] No
Bicycle	[] Yes	[] No
Walk	[] Yes	[] No
Other:	[] Yes	[] No
Other:	[] Yes	[] No

31. Last month, the amount of food stamps I received was: _____ dollars.

Q-32. This questions is designed to determine how much of the interviewees own money was spent on food in addition to food stamps. Ask about how much of their own money was spent for food each week of the month? Write response in the space provided.

32. Last month, of my own money, I spent: _____ dollars for food.

Week #	Amount of my own money spent for food	Interviewer's notes
1		
2		
3		
4		

Section III: Supplemental Food Sources

33. During the past month, some of the places where members of my family or myself ate meals away from home were:

A. _____

B. _____

C. _____

D. _____

34. During the past month, my children ate breakfast at school about _____ days.

35. During the past month, my children ate lunch at school about _____ days.

Q-36 Place a "✓" in the space provided if the client utilized the source; enter an "x" in the space provided if the source was not utilized.

36. During the past month, I received foods from the following source:

[] WIC (Women, Infants, Children)

[] Soup Kitchens

[] SHARE Program (Seton Center)

[] Church

[] Emergency Food Pantry

[] Gardening

[] Fishing

[] Hunting

[] Other_____

[] Other_____

Section IV: Food Security ***Q-44 - 46***If there are no children in the household, write N/A at the end of the statement.*

Now, I'm going to read you a series of statements that people have made about their food situations. For the next ten statements, tell me whether the statement is "Often true", "Sometimes true" or "Never true" for your household or the individuals in your household.

Statement	Frequency		
37. I worry whether my food will run out before I get money or food stamps to buy more.	<input type="checkbox"/> Often true	<input type="checkbox"/> Sometimes true	<input type="checkbox"/> Never true
38. We eat the same thing for several days in a row because we only have a few different kinds of food on hand and don't have money or food stamps to buy more.	<input type="checkbox"/> Often true	<input type="checkbox"/> Sometimes true	<input type="checkbox"/> Never true
39. The food that I bought just didn't last, and I didn't have money or food stamps to buy more.	<input type="checkbox"/> Often true	<input type="checkbox"/> Sometimes true	<input type="checkbox"/> Never true
40. I ran out of the foods that I needed to put together a meal and I didn't have money or food stamps to get more food.	<input type="checkbox"/> Often true	<input type="checkbox"/> Sometimes true	<input type="checkbox"/> Never true
41. I can't afford to eat properly.	<input type="checkbox"/> Often true	<input type="checkbox"/> Sometimes true	<input type="checkbox"/> Never true
42. I am often hungry, but I don't eat because I can't afford enough food.	<input type="checkbox"/> Often true	<input type="checkbox"/> Sometimes true	<input type="checkbox"/> Never true
43. I eat less than I think I should because I don't have enough money or food stamps for food.	<input type="checkbox"/> Often true	<input type="checkbox"/> Sometimes true	<input type="checkbox"/> Never true
44. I cannot give my child(ren) a balanced meal because I can't afford that.	<input type="checkbox"/> Often true	<input type="checkbox"/> Sometimes true	<input type="checkbox"/> Never true
45. My child(ren) is/are not eating enough because I just can't afford enough food.	<input type="checkbox"/> Often true	<input type="checkbox"/> Sometimes true	<input type="checkbox"/> Never true
46. I know my child(ren) is/are hungry sometimes, but I just can't afford more food.	<input type="checkbox"/> Often true	<input type="checkbox"/> Sometimes true	<input type="checkbox"/> Never true

* Cornell/Radimer Food Security Questionnaire (items 37-46) used with permission of Christine Olson, PhD, RD.

Section V: Household Income

Q-47. You may say to the interviewee. "I am going to call some numbers. Tell me which one is closest to your household income for last month."

47. Not counting food stamps, the household income for last month was about:

- | | |
|---------------------------|----------------------------|
| [] less than 200 dollars | [] 601 - 700 dollars |
| [] 201 - 300 dollars | [] 701 - 800 dollars |
| [] 301 - 400 dollars | [] 801 - 900 dollars |
| [] 401 - 500 dollars | [] 901 - 1000 dollars |
| [] 501 - 600 dollars | [] More than 1000 dollars |

Q-48 Welfare/AFDC may also be known as public assistance. SSI is Supplemental Security Income. Specify other.

48. A part of my of my household income is provided by:

- | | | |
|-------------------|-------------|---------------------------|
| [] AFDC/welfare | [] SSI | [] Unemployment Benefits |
| [] Child Support | Other _____ | |

This is the end of the interview. Record the length of the interview here: _____ minutes. Check each page quickly to make sure that all questions were answered completely. After doing so, give the participants the \$10.00 gift and obtain their signature on the signature form which has been provided to you.

APPENDIX B

PERMISSION STATEMENT FOR RADIMER/CORNELL INSTRUMENT

Date sent: Tue, 28 Nov 1995 14:40:51 -0600
To: "BETTIE BLAKELY" <BBLAKELY@umes-bird.umd.edu>
From: cmolson2@facstaff.wisc.edu (Christine Marie Olson)
Subject: Re: Radimer's Food Security Questionnaire

Dear Professor Blakely,

Dr. Radimer is no longer at Cornell and is in Queensland, Australia. However, I am able to give you permission to use the questionnaire. So you have my permission to use it with appropriate citations of the following two references.

In the November issue of the Journal of Nutrition, we have published a validation study of the instrument. You will want to read this article before you use the instrument. Also, I'd suggest that you use the version of the instrument that is contained in the notebook, "Food Security in the United States: A Guidebook for Public Issues Education." Washington, D.C.: Cooperative Extension System, 1994. It should be available from the Cooperative Extension Specialist in Food and Nutrition at your university.

For background, you may want to get a book called, "Conference on Food Security Measurement and Research" January 21-22, 1994 from the Food and Consumer Service of USDA at 3101 Park Center Drive in Alexandria, VA.

Good luck on your study.

Sincerely,
Christine M. Olson